

"Bedlam, I think we watched you" —<u>Shakespeare</u>

MAJOR-GENERAL J.F.C.FULLER

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WATCHWORDS

Major-General J. F. C. FULLER

"Bedlam, I think we watched you"

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THE IMPLICATIONS OF TOTAL WAR

TOTAL WAR IS A REVOLUTIONARY PHENOMENON. IN THIS RESPECT IT DIFFERS from political wars waged for dynastic or strategic reasons. It is not, as Clausewitz said of war, "a continuation of State policy by other means," but instead a conflict between a new way of life and the existing order. It is essentially a spiritual struggle in which an idea transcends all current life values, and for which men are willing totally to sacrifice these values, including their own lives.

It is vitally important that the democracies (Old Order) should understand this, otherwise they will miss the central fact in the present struggle, and by missing it every other fact will be viewed in a false light. Though they rightly proclaim the present war to be an ideological conflict, a war of ideas and therefore revolutionary in character, where, may it be asked, is their revolutionary spirit—that spark which should fire all their actions? To answer that it is to be found in some form or forms of "freedom" to be introduced once the war is won is nonsense, because a revolutionary war can only be fired by ideas which are in a state of violent combustion. As well expect a motorcar to run on hypothetical petrol as to suppose that a revolutionary war can be sustained by an idea in vacuo. Hence the sterility of the Atlantic Charter.

Again and with greater logic it may be suggested that the answer is to be sought in the way of life created by democracy, and that as this way is more vital than any established by the various autocracies, in the end it will prevail. Should this be so, then, it must be asked: How comes it that instead of the democracies growing more and more democratic as the war proceeds, they are becoming less and less so? In fact, to-day, they are autocracies all but in name, yet still abjuring the faith which autocracy demands to sustain it. The rituals they have adopted, but the creed they have not, and what is the result? The rituals are no more than mumbo-jumbo: they do not work because the magic of faith does not vitalize them.

The conclusion, therefore, is that, as hypothetical creeds are at a discount when fighting actual ones, unless the Old Order possesses a survival value superior to the New, it cannot fortify itself by adopting the form of the New whilst simultaneously anathematizing its spirit. Either it must hold fast to its own creed as it is, or else it must so modify it that its survival value will transcend that of the creed it is fighting. Should this not be done, then, even should it win its war, the probabilities are that either in full or in part it will accept the creed of its antagonist, and thus end by stabilizing the very way of life it set out to destroy.

History will show that this is no mere assumption; therefore I will now turn to its record of revolutionary wars, total in idea if not in form, in order to substantiate this probability.

During the last four hundred years the greatest revolutionary conflict was that of the Wars of Religion which followed in the footsteps of the Reformation.

It was a clash between Catholics and Protestants, the first seeking to stand still and the second determined to move on, so that religion might be fitted to the economic changes which had been in gradual development since the days of the Crusades. This conflict lasted for nearly 100 years and culminated in the most barbarous struggle in modern history—namely, the Thirty Years' War, fought between 1618 and 1648. During it Central Europe was devastated, nearly half of its population perished and not a few of its people were reduced to cannibalism.

When it opened, the Catholic League set out to extirpate Protestantism, the Emperor Ferdinand II proclaiming: "Better a desert than a country ruled by heretics." But as the Protestants placed freedom of worship above life, the result was that, when through mutual exhaustion the war ended, though Central Europe was reduced to a desert, heresy remained.

The length and horrors of this war may be attributed to the fact that ideologically both parties were totalitarian. Nevertheless the New Order won, for though the Catholics in no way accommodated themselves by borrowing from Protestantism, by 1648 the universalism—that is totalitarian nature—of their Church was irrevocably destroyed.

The next great ideological struggle was fought out between 1775 and 1815—from the outbreak of the American War of Independence to the downfall of Napoleon. It opened with the skirmish of Lexington and ended with the decisive battle of Waterloo.

As the idea behind the Wars of Religion had been "freedom of worship," in this conflict it was "political liberty"—the power rather than the right of a community to decide upon its own form of government. It was this clash between the English in England and the English in North America which more so than the French Revolution brought this stupendous struggle to a head.

Of the colonists, Stedman, a participant in this war, wrote: "Their councils, animated by liberty, under the most distressing circumstances, took a grand and high-spirited course, and they were finally triumphant." Whereas "On the whole, the British Government did not proceed on any grand system that might control particular circumstances and events; but studied to prolong their own authority by temporary expedients."

It was more so in America than in France that the French Revolution sprang to life. It was from there that the French soldiers brought home with them the seeds of liberty, equality and fraternity. Summing up his impressions of that war, the youthful Saint-Simon exclaimed:

"I felt that the American Revolution marked the beginning of a new political era; that this revolution would necessarily set moving an important progress in general civilization, and that it would, before long, occasion great changes in the social order then existing in Europe."

It certainly did, and in spite of the fact that though the counter-revolutionaries, headed by Great Britain, after a twenty-three years' struggle physically defeated Revolutionary France, ideologically Great Britain succumbed to the revolution, and in 1832—that is, only seventeen years after the fall of Napoleon—bourgeois democracy was fully established in England. In short, the heresies which in 1793 the British set out to extirpate were in the larger part accepted by them as the dogmas of their political creed.

Out of this new dispensation emerged yet another revolution, this time not a clash between two religious creeds or between two political philosophies, but instead between two economic orders—the "Haves" and the "Have-Nots," which Liberalism (bourgeois democracy) coupled with the Industrial Revolution had created. In short, it was a conflict between the proletariat and the bourgeoisie, in which the former sought not so much political power, which meant nothing to an empty stomach, but economic freedom—freedom from want. Such was the pivotal idea of the totalitarian revolution which in 1917 burst forth in Russia.

Though for purposes of war propaganda the democracies welcomed this revolt, no sooner had Germany collapsed than an effort was made to suppress the Russian Revolution, because it threatened the economic and social orders of all Western European countries. The attempt failed, and the new idea percolating through the nations soon took upon itself several forms. In Russia it was called Bolshevism; in Italy, Fascism; in Germany, National Socialism; in Spain, Falangism; in Turkey, Kemalism; and in Japan, Co-Prosperity.

It was this division of the nations into two hostile economic groups which more than any other cause precipitated the present war. A war which in several respects resembles the Thirty Years' War. Whereas in that conflict religious issues became mixed with economic, and foes became friends and friends foes, in the war of to-day economic issues have been mixed with political ones, and allies and neutrals have swapped round to become enemies with truly astonishing unconcern.

In examining the present war as an ideological struggle, it at once becomes apparent that the initiative—driving force—has so far been monopolized by the adherents of the new economics, which must be attributed to the fact that the autocratic nations are endowed with a veritable crusading spirit; for as Herr Hitler once remarked: "A man will not give his life for a business, but solely for an ideal." This is the reason why up-to-date Germany's ideological attacks, when compared to those of her adversaries, have been so devastating. As Mr. Thomas Kernan remarks in his book, Report on France: "Our propaganda has shouted 'democracy and liberty' in a vain belief that slogans, which did not fire the populations of the totalitarian countries in time to prevent the rise of their dictators, will now serve to inspire these same peoples in military victory to turn against their successful leaders. Our ideological offensive has been adjusted to the past, the Nazis have astutely aimed theirs at the future."

It is, therefore, in the lack of a revolutionary creed rather than in deficiencies in arms and resources that the weak joint in the grand strategical harness of the democracies must be sought. This is why their enemy's propaganda is so largely directed against it. Daily and nightly, the Allied Powers are told that they are struggling to maintain an economical order which cannot fail to foster poverty amidst plenty. Further, that in this attempt they are willing to turn the whole civilized world into a vast distressed area so that the monopolists may continue to flourish. Though these claims are exaggerated, as all propaganda is, thousands of patriotic people—certainly so in Great Britain—know that beneath the husk of this propaganda lives a kernel of truth. They realize that between the years 1919 to 1939 there was something radically wrong with the democratic economic and financial systems.

That there was poverty amidst potential plenty, that there were vast distressed areas, slumps and booms and perpetual economic quarrellings within nations as well as between them.

Though these things were felt, they never gripped the souls of the French, English and Americans as they did the souls of the Russians, Germans, Italians, Spaniards and Japanese. With those peoples these things were spiritualized, they became demons to be exorcised, because, so long as they remained, life was not worth the living. Whereas in the democracies they were considered to be no more than material annoyances, matters of pay packets, party politics and such-like things, all subsidiary to life and, therefore, not worth dying for.

Thus it has come about that ever since the opening of this war, the democracies have never been possessed by a great world idea which, like a whip of fire, could and would lash them on—morally, socially, industrially, politically—on to victory or death, as it did the Protestants of the seventeenth century, the Sans-culottes of the eighteenth and the Bolshevists of the twentieth.

This, I proclaim, is the king-pin which is missing in the democratic system of war. Further, that unless the democracies can find it, though militarily they may win the war hands down and reduce their enemies' countries to deserts, heresy will remain. Therefore, ideologically, they will have lost the war, and in losing it will in all probability have to accept in one form or another the new ideas they are now fighting.

May, 1942.

II

THE ATTACK BY MAGIC

THE WORLD WE KNOW IS WITHIN AND NOT WITHOUT US—THIS IS THE BEGINNING of all magic. What we see, feel, hear, etc., is nothing more than a sensuous photograph of reality. As Plato wrote in his *Republic*, "We sit in a cave with our backs to the light and all we can see are the shadows of things as they play upon the wall before us," To us these shadows *are* reality.

Accepting this as our starting-point, then it follows that, should our senses come under the influence of certain controls, we shall sense what these controls want us to sense, and the photographic negative will be different from what it would have been had the influence of these controls been excluded; just as an actual negative differs according to the intensity of light admitted into the camera.

These controls are our emotions, which are closely related to our senses. Thus, if I see a ghost, though it may really be only a shadow, to my sense of sight it is a ghost, and forthwith the emotion of fear stirs within me and I am terrified. What does this suggest? That should this process be reversed, that is, should my emotion of fear first be roused, let us suppose by the suggestion that a ghost is noiselessly approaching me, the result may well be that I shall see it, and that therefore to my senses it will be real.

Whereas the first process is physiological, the second is psychological, which latter word is nothing other than a synonym of magical, because there is no essential difference between the scientific hypnotist who induces me to see what to himself does not exist and the magician who induces me to see what to himself does exist. Whether the one or the other believes or disbelieves in ghosts does not alter the fact that the ghost as seen by me is accepted as real. To carry this argument a step farther; both the hypnotist and magician may be replaced by my "self," my Ego becoming the magician and my emotions his magical box of tricks—sword, wand, invocations, etc.

Carlyle touched upon this supremely important fact when in Sartor Resartus he wrote: "Was Luther's Picture of the Devil less a Reality, whether it were formed within the bodily eye, or without? In every the wisest Soul, lies a whole world of internal Madness, an authentic Demon-Empire; out of which, indeed, his world of Wisdom has been creatively built together."

Should this be accepted, then it will at once be realized that, as in war our emotions are highly stimulated, hate, fear, love, grief, greed, joy, awe, etc., reach their maximum intensity; consequently war is an ideal playfield for magic.

I will now show, by selecting three examples from out the vast number which may be found in military history, that this is so; the first typical of auto-suggestion, and the remaining two of physiological suggestion and psychological suggestion respectively.

As regards the first, one of the most astonishing conquests in history was that of Mexico by Cortés, and so astonishing that, had not magic played the more important part, its accomplishment would have been nothing short of a miracle, as Côrtés and his followers in all probability believed it to be.

In 1519, at the head of 553 foot soldiers (including 32 crossbowmen and 13 arquebusiers), 18 horsemen and 14 cannon, Cortés set out to conquer a hitherto unknown empire organized on a military footing and possessing an army which, when fully mobilized, could put into the field over 100,000 well-armed and well-trained warriors—men who had as fanatical a faith in their war god Huitzilopochtli as the Spaniard had in Christ. It is true that the Aztecs were innocent of firearms and had never seen a horse, and that in consequence they endowed both with magical powers; nevertheless, as the campaign proceeded, by degrees these powers wore thin.

It was not the Spanish cannon and cavalry which conquered Mexico, it was the Mexican monarch himself—Montezuma II. He suggested his own defeat and the collapse of his highly organized and prosperous empire, because he believed as firmly in a myth as Cortés did in the Virgin Mother. This myth was that the tribal god of the Toltecs (a race the Aztecs several centuries earlier had subdued) by name Quetzalcoatl—of fair complexion, dark hair and flowing beard—had, on the defeat of his tribe, sailed away eastwards over the Atlantic, promising at some future date to return and resume his rule. So fervently did Montezuma believe in this legend that, when Cortés appeared, he automatically accepted him as Quetzalcoatl, and through sheer autosuggestion collapsed into moral suicide.

Sending embassy after embassy to persuade the invaders to return whence they had come, eventually he surrendered his person to Cortes, allowed his temples to be desecrated, and was killed in a tumult. In spite of Cortés' faith in God, in spite of his amazing leadership, and in spite of the phenomenal courage of his men, Mexico was conquered by a ghost—Quetzalcoatl. If that is not magic, what, then, is?

My second example is taken from the Crusades and it centres in the Battle of Hattin, fought in 1187. On July 3 that year, Guy de Lusignan, King of Jerusalem, set out from Sephoria in a happy-go-lucky way to relieve the castle of Tiberius, then invested by Saladin. That night the Christian army bivouacked on the slopes of two low hills known as the Horns of Hattin, and there it was surrounded by the Moslems and reduced to extremities by lack of water. Next morning Guy set out to fight his way to Tiberius, when his foot soldiers, no longer able to bear the tortures of thirst coupled with the incessant showers of Moslem arrows, broke away in panic and scrambled up To persuade them to reform their ranks, Guy and his knights took up a position on the level ground, where the King ordered the True Cross to be raised—the most sacred emblem in all Christendom. At once the morale of his men revived, and running down in crowds, all became mixed up, foot, archers and knights, huddled together in a confused mass around the holy rood. Then thousands with uplifted arms supplicated it and frenziedly called upon it to grant them a miracle. Nothing happened; no host of armed angels appeared from Heaven, nor did the earth open and swallow up the Infidel hordes. Nothing happened: this time the ghost was proved to be Such was the turning point in the Crusades, for if the magic of a shadow. the True Cross could not command victory—what, then, could?

My third example is, perhaps, the most dramatic of the three. In 1075 a quarrel arose between the Emperor Henry IV and the Pope—Gregory VII; whereupon, without a moment's hesitation, Gregory laid Henry under interdict. Infuriated by this, writes Brooks Adam, "Henry marched on Italy, but in all European history there has been no drama more tremendous than the expiation of his sacrilege. To his soldiers the world was a vast space, peopled by those fantastic beings which are still seen on Gothic towers. These demons obeyed the monk of Rome, and his army, melting from the emperor under a nameless horror, left him helpless." Thus, through magic and not through force of arms, did Henry appear before the gate of Canossa "a penitent in white raiment standing in the dreary snow for three winter days," seeking the pardon of the magician who had defeated him.

It may be urged that all this, though interesting, is old, old history, and that to-day, we live in an age of scientists and not of magicians. True; yet as Carlyle long ago pointed out: "Demonology we have now named Madness, and Diseases of the Nerves. Seldom reflecting that still the new question comes upon us: What is Madness, what are Nerves?"

Names change, yet magic—call it if you prefer "psychopathology" remains with us, and in these present days—highly credulous and therefore superstitious—hourly we use it as a formidable weapon under the name of "propaganda".

Is not Dr. Goebbels a magician? To defeat his magic we have either to prove it a shadow or blast it with magic of a higher order.

Are not these rational facts? He who has no confidence in himself is a Montezuma; he who raises a sterile hope in the hearts of his followers is a

de Lusignan, and he who can by sheer force of faith in himself subdue his enemy is a Gregory VII.

Times change and so also do names, yet, believe me, men do not change, and because of this simple fact magic remains an engine of war.

October, 1942

III

CAMBRAI TO EL ALAMEIN

ON OCTOBER 24, 1917, AFTER TWO MONTHS' WRANGLING, G.H.Q. INSTRUCTED Headquarters Tank Corps to prepare to launch on November 20 a great tank assault against the Hindenburg Line south of Cambrai.

Twenty-five years later—to be exact, at 9.30 p.m. on October 23, 1942—the heavy artillery barrage which heralded the Battle of El Alamein opened, and whilst at Cambrai victory had been limited, this time it was complete.

Yet, in their own particular ways, both these battles were decisive: Cambrai, in so far that it established a precedent upon which every subsequent tank battle has been based; El Alamein, in that it utterly shattered the Italo-German forces in North Africa, and was followed by a pursuit which will pass into legend.

The problems of both these battles were much the same, for not only were both battlefields restricted by unattackable flanks—Cambrai by two canals and El Alamein by the Mediterranean and the Qattara Depression—but both problems could alone be solved by a frontal attack; in the one case against trench lines and wire and in the other against minefields and strong points.

Nevertheless, how different were their respective tactics, so different that they are all but contradictory.

At El Alamein the tactics decided upon were anything but novel, for Rommel had proved them out five months earlier, when to all intents and purposes it was seen that they were a return to the artillery battles of 1916-1917; for their leading feature was an infantry advance covered by a rolling barrage. Strange to say, these tactics were the self-same which the Tank Corps in 1917 had, after much argument, persuaded G.H.Q. to abandon, and this they did with the greatest of reluctance.

Further, at El Alamein there was no question of surprising the enemy, except by weight of assault; whereas at Cambrai surprise was the king-pin in the Tank Corps' plan, and had not a complete surprise been guaranteed, that battle would not have been sanctioned.

So it came about at El Alamein that for the old preliminary artillery bombardment was substituted an intense air bombardment, followed, as I have mentioned, by an artillery barrage, which, half an hour after it opened, in turn was followed by an infantry advance, under the protection of which the mines were grubbed up. Moving forward on a front of twelve miles, by November I a penetration of five miles had been made, and the next day a lane having been cleared, in bulk the Eighth Army tanks moved forward and the battle proper opened.

Rommel's¹ mistake was that as he did not intend to attack, but instead to await attack, he also should have harked back to the tactics of the last war, and have done what the French did in 1918, which was, when an attack was imminent, they left the lightest possible garrisons in their front line and withdrew the bulk of their troops well in rear of it.

In 1918 a ten miles withdrawal was sufficient, but in the machine warfare of to-day Rommel should have carried the bulk of his troops back at least 50 miles, if not 100. Had he done so, and he had ten days to do it in, the probabilities are that he would have found himself in a position to counter-attack his enemy

in force, as the French did in 1918.

At Cambrai no such an opportunity was offered to our enemy, because the battle came as a complete surprise, and because penetration was effected not in ten days, but in ten hours! Here, however, I will look at the problem as it faced the Tank Corps on October 24, 1917.

That Corps was in its infancy—just one year old—and whereas in the Eighth Army every man believed in the tank as fervently as a devout Moslem believes in the Koran, in 1917 few outside the Tank Corps itself looked upon the tank as anything other than a tactical curiosity and its officers and men as pushful

C. in C. Third Army, thought otherwise, the Battle of Cambrai would never have been fought.

Now what did we guarantee to do? To-day the thought of it almost makes the few remaining hairs in my head stand on end. Not only did we know that the whole attack was an experiment for which there was no precedent, but that our tanks could not span the Hindenburg trenches, and therefore could not cross them!

cranks. Had it not been that General Sir Julian Byng (later Lord Byng)

Nevertheless, we promised to cross the very largest: we promised to crush paths through the enormous wirefields for the infantry: we promised to remove large sections of those same fields for the cavalry: we promised to haul forward quantities of material to bridge the St. Quentin Canal: we promised to supply ourselves across country with 378 tons of petrol, ammunition, etc., because lorries could not do so: we promised to establish mobile wireless stations, to lay miles of cable, to devise new tactics and to train the infantry to have confidence in it. In short, every objection and difficulty which G.H.Q. raised we promised to overcome.

We promised all these things and others, because we had the power necessary to solve them, not only our wits but also 474 105 h.p. tank engines—they were our power plant: horse-power could answer every question.

All these many and seemingly impossible problems had to be solved in four weeks less one day—and they were solved! For instance, Colonel Searle, our chief engineer, forthwith overcame the Hindenburg Line difficulty by inventing the tank fascine, a great bundle of brushwood weighing one and a half tons, which could be tipped from the top of a tank into a trench and half fill it in.

¹ As subsequent reports have shown, Rommel was in Germany during the greater part of the battle. Alan Moorehead in his The End of Africa writes: "... his substitute, von Sturma, did a thing which Rommel would never have done—spaced his forces more or less equally along the whole line. ... Rommel, who had come racing back from Berlin, took one look at the chaos . . . wisely abandoned the Italian infantry and got clean out of Egypt and Cyrenaica with the remainder of his tanks and his best mobile units."

To make them we cut down 400 tons of undergrowth in the Forest of Crecy, and scoured England for miles of chain with which to bind the fascines up.

To clear lanes through the entanglements for the cavalry, what did we do? We sent back to England for ships' anchors and anchor chains. We fixed these on to 32 tanks, and this is how they worked. Once the wire-sweeping tank entered the wirefield it cast its anchors—two in number—and then by moving forward tore the strands asunder, and when nearly through swung right-handed and rolled the entanglement up as if it were a carpet. Gaps of from 50 to 60 yards wide were thus made and the ground left so free from wire and pickets that it seemed as if it had been swept by a gigantic vacuum cleaner.

Cambrai was won by forethought, by foresight and by accepting risks which had never been accepted before. Cambrai was won not by iron, but by brains—its sheer novelty pushed it through and the surprise it gained was overwhelming.

El Alamein was won by infinite labour, but of a different kind; by careful, methodical preparation; by astonishing valour, and above all by weight of metal skilfully deployed.

Cambrai sowed the seeds of a tactical revolution. El Alamein gathered the harvest in.

Thus it has come about that, on the day I write this totally inadequate article—for both these battles demand a book apiece—the church bells are ringing for El Alamein as twenty-five years ago they rang for Cambrai.

November 20, 1942

IV

DAVID AND GOLIATH

ON DECEMBER 2 COLONEL FRANK KNOX, SECRETARY OF STATE OF THE U.S. NAVY, informed us that, whereas during the current year the American Government will have spent £11,500,000,000 on munitions, next year the figure will stand at £17,500,000,000.

This, certainly, is most impressive. From January 1, 1943, approximately £50,000,000 a day—that is, £1,000,000 every half-hour—is to be spent in America mainly on weapons. What can our enemies do in face of such a lethal avalanche? Is, then, sheer dollarage and tonnage going to win the war?

I wonder, and wondering I will ask my readers to turn to the First Book of Samuel, Chapter XVII. In it we are introduced to a gent by the name of Goliath. Let us look at him. He stood somewhere between nine-feet six and ten-feet six. He wore a helmet of brass, greaves of brass, and carried a shield of brass. He was altogether a very brassy, brazen-faced fellow. If my calculations are correct, his coat of mail weighed 145 lbs., and his spear, which "was like a weaver's beam," was capped by an iron spike weighing over 17 lbs.

The very sight of this monster set the Israelites in a dither, so much so that, when he stepped forward, they fied the field. What happened?—the story is most instructive. Out stepped David, whereupon Saul armed him in armour and "put an helmet of brass upon his head." Yet, strange to say, David

discarded these costly things, and with a sling worth twopence and "five smooth stones" costing nothing, he ran forward, "put his hand in his bag, and took thence a stone, and slang it, and smote the Philistine in his forehead, that the stone sunk into his forehead; and he fell upon his face to the earth." Then David drew Goliath's sword and chopped off his head; whereupon the Philistine army bolted.

What did this victory cost? One pebble! and all that beautiful Bluebelled brass weighing thousands of shekels went to decorate David's tent. An unlooked

for pebble had won a battle—what a lesson!

The scene changes from Shochoh in Judah, in the Biblical year 1063 B.C., to Passchendaele and Cambrai in Northern France, the year is A.D. 1917. By then Goliath had been transmogrified into shell output and David into the tank. In the preliminary bombardment which preceded the Battle of Passchendaele, 4,282,550 shells, costing some £22,000,000, were fired. In manufacture they represented 176,000,000 man-hours at half a crown the hour.

On the first day of the Battle of Cambrai, 378 fighting tanks were used and 293,149 shells were fired. The tanks cost approximately £5000 apiece and the shells £5. Though only 48 tanks were hit, I will suppose that all were lost, then the cost of the tanks and shells was, in round figures, £3,350,000, and not £22,000,000. The saving was, therefore, £18,650,000, or 149,200,000 manhours, which represents 49,733 men working for 300 days at 10 hours the day at half a crown the hour. In 1917, 49,733 men would have provided the personnel of 67 tank battalions: at Cambrai we had nine!

Let us now shift the scene on by twenty-three years: Goliath has grown into the Maginot Line, which is reputed to have cost £100,000,000, or two days of approaching 1943 American war expenditure! Yet that monstrous wall and its costly garrison which, together with the French field army, numbered 4,000,000 men, were overrun and overcome in five weeks by certainly not more than ten German panzer divisions, manned by 150,000 soldiers.

Next, a year later in Russia the tank began to lose its magic: what in heaven's name had happened? In answer, may I suggest, from a David the tank—or anyhow its tactics—had grown into a Goliath, and why? Because it is the predestined fate of every weapon to do so—there are no exceptions. Again—why? And here is my answer.

The might of a strange or novel weapon, also of strange or novel tactics, does not primarily reside in its killing power, but instead in its hair-raising power—power to attack the credulity of its enemy, his nerves and his morale, and by attacking them stimulate his instinct of self-preservationt to so high a degree that he bolts in panic from before the phantoms begotten by his terror-stricken mind.

The Philistines bolted from before David's pebble, as the Germans at Cambrai bolted from before our tanks, and as the French bolted from the German tanks in May and June, 1940. Of this last dramatic event a staff officer has written as follows in his diary:

"May 19th, 1500 hours. News that the Panzers are in Amiens. This is like some ridiculous nightmare... The French General Staff have been paralysed by this unorthodox war of movement. The fluid conditions prevailing are not dealt with in the text-books, and the 1914 brains of the

French generals responsible for formulating the plans of the Allied Armies are incapable of functioning in this new and astonishing lay-out."

In Russia it was the reverse, for the Russian generals remained fully capable of functioning—and why? Not so much because their armies were equipped with tanks, but rather because, through study, they themselves had become familiar with tank warfare, and no longer did ignorance endow those machines with supernatural powers. Their nerves were salted—that was all.

To change the subject and yet to remain strictly relevant. Do you believe in ghosts? I don't know, yet I am quite certain that should you, when you retire to-night, see one striding up and down the landing outside your bedroom, whether you are a spook fan or not, you will all but jump out of your skin.

But suppose you saw the apparition seven nights running, though perhaps still a little nervous, you would almost be on nodding terms, and, should this go on for a fortnight or so you would probably end up by saying, "Good night, old man," and not even bolt your door. In short, familiarity breeds contempt, or shall we say, self-assurance?

Such is the life history of every novel weapon—the Macedonian long pike, the Roman short sword, our own long bow—the arquebus, the musket, the rifle, the machine-gun, and the tank. So long as they do not belong to the textbooks, each in its way appears to be irresistible. Swish goes a pebble, and down you go morally, scared out of your wits with your hands up, for you simply do not know what else to do. David fells you every time—you in your brass helmet.

Yet, in weapon evolution, David never fails to grow into a Goliath directly his moral bluff is called. The Russians were not afraid of tanks, the French were, and so were the Germans in the last war, and so should we have been had we been in their shoes. Yesterday it was sauve qui peut; to-day it is, "Hullo! another jolly old tank, let's have a crack at it." Its mysterious powers have vanished, because it has become the commonplace.

And so the long and the short of this Biblical study is this: To-day we are once again in need of a novel weapon, and should that be asking too much, then, at least, of novel tactics. We want it as quickly as possible, and incidentally—for some day we shall have to foot the bill—as cheaply as possible. Is, then, dollarage or tonnage the only answer? No. Merely to out-tank our enemy is not enough, nor is it enough to out-bomb him or out-gun him.

David discarded the armour and helmet which Saul gave him, and instead picked up a pebble—a new tactical idea: something which cost nothing instead of £50,000,000 the day. Can we emulate him?

Why, certainly, if like him we first discard our old tactical ideas. This can be done not so much by thinking in terms of killing, but rather in those of scaring our enemy stiff, as the Philistine host was at Shochoh—what a suggestive name—when it saw its champion brass-hat go down before a pebble slung from a tuppenny sling.

December 16, 1942

V

Is the Aeroplane the Master Weapon?

DAVID SLUNG HIS PEBBLE AND DOWN WENT GOLIATH, THEN DAVID DREW GOLIATH'S sword and finished the giant off.

In this fight, the tactical points to note are: Without the sword the pebble would have proved insufficient, and without the pebble the sword would have been of no avail. Which then was the master weapon, the weapon which sets the fighting pace, and which was the decisive weapon—the weapon which concludes the issue?

Obviously the answer is: the pebble set the pace and the sword finished off the job. Nevertheless, right through the history of war the reasons for this answer have seldom been examined and never less so than to-day.

What this answer means is this: all tactics should be based on the correct relationship between weapons, and not on the powers of a single weapon or on numbers of weapons in bulk. Granted this, then it follows that not until this relationship is established can production become economical. Therefore, this relationship influences industry, shipping, transportation and agriculture, all of which, as well as many other activities, makes a call on the raw materials out of which weapons are made. Consequently, not only is this problem of relationships tactically important, but its implications are all embracing.

Throughout history weapons have fallen into two main categories, shock and missile, and to-day the second is far the more effective. In their evolution certain factors have predominated, and the leading ones are range, accuracy, volume of fire and portability, of which the first is the master characteristic, the full understanding of which is the key to tactical efficiency—the combined use of weapons in battle. A moment's consideration will make this clear.

What enabled primitive man to set out on his way towards the mastery of the animal world? It was the reach of his club. Later, the reach of his spear, and later still the range of his arrows. In turn, each was a master weapon, because each increased the killing range. Thus, to take two examples:

In the fourteenth century our English long bow was the master weapon which shaped our tactics, because, by killing and wounding the horses of the French knights, it enabled our own knights to charge home at advantage. Towards the end of the next century, when Charles VIII of France invaded Italy, Machiavelli tells us that he conquered that country with a piece of chalk. What he meant was this: Charles's artillery was so powerful that in terror the Italians fled before him; therefore, in order to conquer, all he had to do was to chalk up the billets of his soldiers and occupy them.

Now, be it noted, and carefully so, that in the first of these examples the master weapon was not the decisive weapon, for it was the lance and not the bow which decided Crécy and Poitiers; whereas, in the second, Charles's cannon not only set the tactical pace, but also clinched the argument.

Further, history shows that the master weapon has seldom been the decisive weapon, and when it was it remained so only for a brief period. Thus, had David's pebble killed Goliath outright (perhaps it did) mastership and decision would have coincided; but in order to deprive David's sling of the second of

these qualifications, had Goliath lived, all he need to have done was to tie a visor to his helmet.

To-day there can be no shadow of doubt that the master weapon is the eropla ne, because no other weapon approaches it in range.

Is it also the decisive weapon? This is the most important tactical question of the moment, because, so far as I am aware, the functions of the R.A.F. have never as yet been laid down by the War Cabinet.

If the aeroplane is the decisive weapon, we want one kind of fighting organisation; if it is not, then we want another kind. To both kinds the aeroplane will most certainly set the tactical pace, and therefore be the master weapon; but in the second it will not deliver the knock-out blow—anyhow, single-handed.

There is a school of thought, centred more particularly in the R.A.F., which boldly proclaims that, given sufficient machines (the same argument can be applied to U-boats), aircraft alone can, by bombing his centres of population, reduce the enemy to collapse. Is this so? for if it is, then—setting aside humanity—nothing should stand in the way of its accomplishment. I, myself, maintain that it is not so, and that every attempt thus far made to prove it to be so has conversely proved it to be not so.

For instance, in 1940-41 we were subjected to over six months' intensive air bombardment, since followed by intermittent bombing. One house out of every five in the country has been destroyed or damaged, yet there were no signs of moral collapse, and the fatal casualties suffered up to date are insignificant, on an average 20,000 a year, or less by half the total killed on the road in the United States every twelve months.

Malta is a still more remarkable example of the impotence of air bombing to bring about a decision. The island covers about 100 square miles and the density of the population—2,700 per square mile—is the highest for any country in the world. Though it has been attacked hundreds of times, General Dobbie has recently said: "From the very beginning there was a grand spirit of defiance and a determination among the people of Malta to accept whatever hardships came their way, and to stick it out." And what is even more interesting—that it was not air defence, but "the feeding and the general well-being of the people" which were "the biggest factors in the defence problems of the fortress."

The truth would appear to be this: Terror, unless it is all-pervading, as it was during the Hunnish and Mongol invasions of Europe, is most unlikely to crack up civil morale. If every city, town and village in Germany could be simultaneously bombed and kept under bombardment for a prolonged period, it is possible, even probable, that collapse would follow. But intermittent bombing of a few centres at a time is morally useless, for panic, should panic occur, is purely local. Neighbouring towns are unaffected, and when their turn comes, those previously bombed have recovered their nerve.

Does this mean that bombing for moral effect is of no account? Not at all, but that it must be preceded either by economic attack, which reduces the enemy's civil population to starvation, or by military attack, which through the defeat of his armies induces a feeling of utter helplessness and hopelessness, before its full moral power can be developed.

Should I be right in this, then the fighting organisation we require is one in which the aeroplane, as the master weapon, sets the pace. This means that

fleets and armies should be built and fashioned first from the point of view of assisting in the fullest possible development of air power, and secondly in the fullest possible development of their own inherent powers against their like.

Thus, in 1937, I wrote: "A radical change will have to take place in our idea of the capital ship... she will no longer be a gun-ship but a bomb-ship," for "bomb-power is the key, because air-carried bombs vastly out-range gunfired shells." And so also with armies. They should be organised in accordance with air power, be largely transported by air power, and, when occasion demands, be fully supplied by air power, in order that they may carry out the new tactics of confusion and demoralisation which are the essential mediums through which aircraft can develop their highest effect.

The master and his servants as one household, not the servants on their own and the master on his own, is our supreme tactical problem, and the problem

which David solved 3,000 years ago.

December 28, 1942

VI

THE FIRST BATTLE OF TZARITSIN (STALINGRAD)

THE LATE MAJOR E. M. BRUCE WAS ONE OF THE MOST FEARLESS MEN I HAVE EVER met. I first became acquainted with him in the Tank Corps in France late in 1916, and though he had lost his right arm he was then serving in a Salvage Company. The purpose of those units was to recover broken-down and damaged tanks from the battlefields, a duty which in those days of close fighting and incessant shell-fire demanded the highest courage and nerve.

Shortly after the Armistice Bruce was demobilized, and finding civil life irksome, during the late winter of 1919 he called on me at the War Office to seek re-employment. At the time the Government was supporting General Denikin and his Volunteer Army in South Russia, and as a few days before I had received instructions to send out twelve tanks to him and also establish a school for Russian tank officers at Taganrog, I asked Bruce whether he would care to run it. Jumping at this offer, early in March he set out for Novorossisk with the machines and a small party of instructors.

Once there, he found things very different from what he had experienced in France, and writing to me he said that:

"The Russian officer is a type of man the British soldier does not understand... the following is a typical case... at an examination I asked one what he would do if a certain part of his machine was broken. He answered: 'I would make the sign of the Cross and get out of the tank'.

"On arriving in Russia our men heard of great advances, terrific fighting and terrible losses. These rumours were soon dissipated when they learned the truth. On one occasion three of our men in a droshki by mistake captured what was reported to be a strongly fortified village: on entering it they found that its strength consisted in two or three rifle pits."

The first action fought by Russian-manned tanks is described in the following

report of Major-General Agapeev, Chief of Staff Second Army Corps, and on account of its historical interest I give it in full:

"In the action of the 8th May, in the Voskrossenski Shiroki area, a part of the Tank Division, consisting of three big [Mark V] and two small [Medium A or 'Whippet'] tanks (the latter supported by infantry) attacked the Reds at a distance of 3-4 versts. The enemy opened a heavy rifle and machinegun fire, but did no harm to the tanks, as the bullets could not pierce the armour.

"The big tanks could not keep up with the infantry and had eventually only a chance to fire a few shots at the advancing enemy's reserves.

"The small tanks took an active part in the pursuit of the enemy despite heavy artillery fire. On the 9th of May the tanks took no part in the fighting, on account of the exhaustion of the crews and the need for technical repairs. On the 10th of May the tanks were ready for action, but as the enemy had retreated they were put on trucks and sent to Tchoumakovo Station by rail to avoid the long and tiring journey. According to army reports, the tanks in this fight accomplished their task. The enemy on seeing them fled panic-stricken. Prisoners say that the Bolsheviks on seeing the tanks left their positions and went to the rear, saying that they would fight no more unless tanks were given them. The arrival of the tanks made a great moral impression on the local inhabitants. The crews of the tanks were in action for the first time, and therefore there were some defects and omissions on their part.

"On the 10th of May our troops, supported by three tanks, advanced towards Khanjenkovo on the Khartsissk sector. The Reds met our tanks with heavy artillery fire, one of the tanks received up to twenty hits with pieces of shell and one direct hit, which did no serious damage. After repair, the tank was able to continue helping the successful advance of the infantry. The tanks in this fight made a strong impression on the Reds; the mere sight of the tanks threw the enemy's ranks into confusion and he fled, panic-stricken, abandoning rifles, ammunition, and clothing, general the moral effect of the tanks justified to the full the hopes which were placed in them, but the impression which they made and the result of their operations would have been greater still had there not have been a few tactical and technical faults, which were elicited in action. These were: insufficient training of the crews and to some extent lack of initiative, slow speed of the big tanks—probably due to insufficient training -and large consumption of petrol, which necessitated refilling every ten versts [or about seven miles. Ridiculously low, as the Mark V tank had a radius of action of forty-five miles and the Medium A of eighty. Probably due to keeping the engine running when halted]. Co-operation of large and small tanks would appear to be desirable: a few horsemen ought to be attached to them for liaison purposes,"

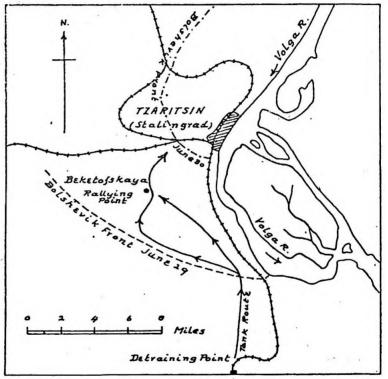
Another tank action was fought on May 20th, and on the 27th and 29th Bolshevik wireless communiqués admitted two considerable withdrawals on Denikin's front due to his tanks, and in a report issued on June 30, it was stated that: "South of Tzaritsin the enemy, supported by four tanks and armoured cars, has pressed us back to the north of Shepetovka."

Thus it came about that the Russian Volunteer forces approached Tzaritsin,

to-day known as Stalingrad, and, on June 23, Bruce, at Taganrog, received orders to make ready to advance: whereupon he at once set about to assemble his detachment.

It consisted of two Mark V and three Whippet tanks manned by Russian officers, and one Mark V manned by a British crew. On the 25th, the detachment entrained, and, shortly after starting, one of the Russian Section Commanders stopped the train, detrained his machines, ran them about in a field, and, finding one defective, decided to leave it behind!

The following day the detachment arrived at Corps Headquarters, where Bruce received instructions from General Wrangel—Commander of the



FIRST BATTLE OF TZARITSIN, June 29 - July 1, 1919

Caucasian Army—to assume personal command of the four Russian machines as well as the British one. This, I think, was fortunate; anyhow, on the 27th, Bruce set out with his two Russian Section Commanders and Captain Walsh, commanding the British tank, to reconnoitre the ground to the starting point. Next day, in an aeroplane of the 47th Squadron, R.A.F., he reconnoitred the enemy's front line, and, finding this work not sufficiently exciting, on his way back, seeing a Bolshevik observation balloon in the distance, he ordered the pilot to attack it, and down it came.

Having discovered that the enemy's line ran in a segment of a circle some ten miles south-west of Tzaritsin, Bruce decided on the following operation:

(1) Two Mark V tanks were to break through the enemy line due south of Tzaritsin, swing left, run along the front, crush down wire and clear a way for the infantry.

(2) Two Whippets (the third had by now broken down) were to cross at the same spot and make for Beketofskaya and cut off the enemy guns.

(3) Rallying Point—Beketofskaya.

(4) One aeroplane of the 47th Squadron, R.A.F., was to co-operate with the tanks. The petrol lorries were placed under Captain Shaw, and one bullock cart, carrying a refill of petrol, etc., was allotted to each tank, and ordered to follow it up as closely as possible.

At 2 a.m. on the 29th the tanks moved forward under heavy rifle and machine-gun fire, and half an hour later, crossing the enemy line, the Bolsheviks rapidly withdrew. Thereupon the British Mark V tank swung left, whilst the Russian went to the assistance of a Whippet caught in the wire. The British machine, having travelled a mile or two down the enemy's trenches, turned north and was fired upon by four batteries. At about 5 a.m., when outside his tank, Captain Walsh was wounded by a shell splinter, and Captain McElvaine took over command. What part the other three machines played is uncertain; but, at 6 a.m., Bruce, who was mounted, galloped over the field and directed all machines to proceed to the Rallying Point. Meanwhile the Volunteer cavalry advanced.

At 3 p.m., the tanks, having filled up, once again moved forward, when the enemy counter-attacked, pushing back the left flank of the Volunteer Army, but on catching sight of the tanks, now reduced to three, they beat a hasty retreat. Next, when running along a ridge towards Tzaritsin, the tanks came under heavy gunfire, and on the sole remaining Whippet being put out of action by a shell splinter, the two Mark V's withdrew to a ravine a mile to the west of the town.

The next day, Bruce arranged to move into Tzaritsin at 2 a.m., but as the lorries were unable to get up and the bullock carts were nowhere to be found, the advance was postponed until July 1.

That day, sufficient petrol having been collected to fill one of the two remaining machines, Bruce took command of it, and at 4 p.m. he set out for Tzaritsin. An hour later, with six British mechanics as crew, he stormed and captured what to-day is called the solar plexus of Russia. Thereupon 1,500 enemy infantry and ten guns surrendered, and the Volunteers entered the town without firing a shot.

January 15, 1943.

VII

ARE WE HYPNOTISED?

OFTEN, SO IT SEEMS TO ME, WE HAVE BEEN LIVING IN A TRANCE. FIRST, THERE was the phoney spell—a strategical black-out. Next we were bamboozled into believing that Hitler had missed the bus, and when, unexpectedly, he caught the Norwegian air liner, we were so moonstruck that we thought he had gone mad. When France collapsed, we saw nothing but invasion, and when Singapore leapt into the news, everything except it.

These things, and many others, we suggested to ourselves because they were what we wanted or did not want. Hence the fantastic beliefs which, like virulent epidemics, have swept over us, and all because we were ignorant of the character of the war; for a well-trained mind is relatively insuggestible.

Even to-day, after forty months of this dream-walking, we cannot get the mass war of 1914 to 1918 out of our heads. Then we enlisted 4,970,902 men; shipped to France 25,497,351 tons of munitions and supplies; suffered 2,974,257 casualties; issued 22,386 artificial eyes, 46,973,000 pairs of boots, 136,396,000 pairs of socks, and 52,883,000 yards of flannelette for cleaning rifles. In all it cost us £8,742,000,000.

That's how we won—the secret is out. Well, then, poundage, tonnage, mass and numbers are what we require. Phew! Just look at the figures to-day. An American budget of £25,000,000,000; 8,000 lb. bombs on Berlin—the total dropped on us during the last war was 300 tons! Forty thousand Germans killed in a jiffy, and their dead now mounting up towards 15,000,000!

Five ships a day, a plane a minute, A tank in two, the war—we win it.

I don't think. Not because numbers mean nothing, for they mean a lot; but because—give me ten times the tools used by a skilled carpenter, and with half the normal number in his bag he will do better than I can.

First, it is an architect we want; next, his plan, and, when we have it, numbers, mass and 8,000 lb. bombs will fall into their proper places—and not necessarily on Berlin.

However, there are signs that we are passing from trance into a state of wakefulness. One is that a few days back I read in a newspaper: "Another battle for Britain is in full force. . . . In 1940 the onslaught was from the air. . . . In 1943 the onslaught is from under the sea." True, yet not quite true, because we should have realized this from the moment the Athenia went down on September 3, 1939.

Why we did not, was that for long—ever since 1919—we had, so far as strategy is concerned, fallen into a Continental trance. We overlooked the geographical fact that we inhabited an island, and that the only string of figures worth remembering was that in the last war the German U-boats sank 13,915,500 tons of shipping. Somehow or other we forgot Lord Jellicoe's warning: that the German U-boat campaign was, "The gravest peril which ever threatened the population of this country, as well as of the whole Empire."

What were then the material means employed? To start with, in 1914 Germany had twenty-eight U-boats. During the war she built 332—that is, on an average 6.5 a month. To-day we are told that, in all probability, she is building 300 a year—that is twenty-five a month. We are also told that sinkings do not as yet approach new construction; neither did they in 1914—1919.

During those years Admiral von Scheer informs us that 184 U-boats were sunk. Therefore the German net increase per month was approximately half the new construction added to the original twenty-eight. This is an ominous conclusion.

Had Germany, in 1916, closed down her offensive land operations, and, under cover of a defensive on her two fronts, had she put all her energy into building U-boats, it looks very much as if we should have been out of the war either in 1917 or early the following year. No poundage, no tonnage, no artificial eyes, or yards of flannelette could have saved us; one thing only—an antidote to the U-boat.

Are we not approaching a somewhat similar situation to-day? As I think we are, I would ask our Architects to meditate the wisest words Napoleon ever uttered: "The whole art of war consists in a well-reasoned and extremely circumspect defensive, followed by rapid and audacious attack." In other words: unless our home base and its supply communications are securely defended, to attempt a rapid and audacious attack is to ask for trouble.

Yet it would appear that we are feverishly preparing to carry out two mutually antagonistic offensives, one by bombing and the other by landing—invasion.

What does the first demand? An astronomical number of machines: for if in a single night, 1,000 can do no more than knock out about a twentieth part of Cologne, then, to finish that city off, presumably demands 20,000. Yet, quoting from Flight-Lieut. Vernon Blunt's most timely book, The Use of Air Power: "The C.-in-C., Bomber Command, is said to have made the statement that if we could send 1,000 bombers a night over Germany, the war would be over in six months; whilst, with 20,000 aircraft, he would finish it in one night."

I wonder, for my German motoring atlas includes plans of ninety-nine towns and cities of sufficient size and importance to warrant one apiece.

This, however, is not the crucial fact, which is: can such tremendous air attacks be launched from a base which is either slowly or rapidly being strangled? Also another: if they can, then why are we simultaneously preparing to invade? For, if such an operation of war is to end in anything other than a fiasco, at least ten of the invading divisions will have to be airborne. This is essential in order to assure surprise in securing bridgeheads for the waterborne main body.

Though we may now be out of our hypnotic trance, it seems to me that we have awakened into a kind of Jekyll and Hyde. We have two plans—bombing and landing—in deadly conflict. The one wants bombers, the other wants troop-carriers, and both want fighters. Meanwhile Coastal Command—so I see in another new book, Coastal Command at War, wants seven different land aircraft and two different flying-boats.

All said and done, it is Coastal Command and the Royal Navy which

together secure our base and every type of offensive we can launch from it. Is that base secure? Daily we are told to eat more potatoes!

Day by day one more spud, Toil and tears, sweat and blood.

No! My friends, let us refuse to be potatoed into yet another trance, for what we want is not a spud—instead a war policy standing four-square on Napoleon's maxim. Then we shall really cease dreaming.

January 25, 1943.

VIII

BOMB MIND IS THE SOMME MIND

A FEW DAYS AGO I NOTICED THAT A LADY HAD BEEN FINED £5, WITH FIVE GUINEAS costs, for giving away a few surplus eggs. Yet, did first things come first in the oviparous world, it seems to me, on the contrary, had she not done so the fine would have been more appropriate.

Again, when in the summer of 1940 we were thrown into one of our periodical trances, and saw a fifth columnist behind every boiled shirt, we ransacked our restaurants of Italian chefs and forwarded them per S.S. Arandora Star to Davy Jones's locker. Seeing that our military cooks are a standing menace to the stomachs of our fighting men, had first things come first in the culinary world, instead we should have posted them to the Army School of Cookery.

From these two examples it will be seen that first things first is nothing more nor less than common sense—thought and action adapted to circumstances, and not to regulations and mirages of the mind—common sense, which Thomas H. Huxley once defined as "the rarest of all the senses," Let us then consider this rarity with reference to the war, in order to discover to whom our explosive eggs should be delivered, and how best we may cook, or, shall we say, cease cooking the conflict.

The key to common sense is simple thinking, and surely the simplest and most obvious fact in our lives is that we cannot live without food. As food is the basis of life, it is also the basis of war, for war is nothing more than living violently. Food is, consequently, the foundation of strategy, as supply in all its many forms is of tactics. Thus it comes about that at least seventy-five per cent of our present war problem is bound up in administration. Let us glance at it.

We live on an island, and, like many island folk, we are traders more so than agriculturalists. Before the war, two thirds of our essential foods, and in many cases the whole of our luxuries were imported at a cost of some £400,000,000 a year. In fact, from the point of view of food, we were potential hostages in the hands of the several foreign nations who supplied us; therefore, economically, we were not a free people.

To-day our Achilles' heel—lack of home-grown food and raw materials—is daily and hourly being attacked by the U-boat. Therefore, common sense dictates that the destruction of the U-boat is our first problem—the master-problem which, directly or indirectly, influences all our other problems.

To outline what we should do is simple enough, but how to do it requires all our wits to discover and all our energies to carry through. Here then is the

problem in brief:

On the one hand we have the U-boat bases in Germany and the occupied countries, on the other the U-boat fields of operations in the seas. We must restrict those fields and attack these bases. For the first our instruments are the Royal Navy and Coastal Command; for the second Bomber Command, and, in certain cases, Fighter Command, also Commandos.

Not until the requirements of the three intimately related problems, command of the sea, command of the air above the sea, and command of our enemy's coastlines, have been met in full, should a single unessential man-hour be expended on any other problem; for not until a solid defensive base has been

established can offensive action be other than a gamble.

Granted such a base, our next problem is: What kind of offensive should we launch from it? The key to this questions is suggested by another—namely, in what kind of age do we live? As we live in a highly mobile one, it logically ollows that offensive action must be based on velocity.

Though this was also our problem at the beginning of the last war, at that date military mobility was so little changed from what it had always been, and fire-power so vastly increased that, within six weeks of the war's opening, the defence dominated the attack. Then the problem became one of reinstating mobility. How was its solution sought?

First, by means of great artillery battles in which a shell lust possessed each army. A hail of iron, under which nothing could live, was on the one hand to open the road to Berlin and on the other the road to Paris. Hence the unimaginative massacres of the Somme, of Verdun, and of Passchendaele.

"Artillery conquers, infantry occupies," became the slogan; nevertheless, the P.B.I. were mown down by the hundreds of thousands.

Utterly failing in their object, these vast battles of bombardment were followed by a more reasonable solution—a combination of tanks and infantry, of velocity and stability, of new and old. What was the result? In less than a year our enemy's tremendous defences on the Western Front collapsed; the road to Berlin was opened. Alas! We did not tread it.

To-day we are once again stuck in the mud. No-man's-lands are now of water—the Channel, the Mediterranean, the China Seas. How are we going to cross them? That is our problem, as it was in 1915 to 1917, when no-man's-lands were but narrow strips of shell-blasted earth.

By air bombing instead of artillery blasting, answer the Air Forces of the Allied Powers. The same old bleat; Blast! blast! blast! by bombs instead of shells. This time air power wins through—look at London, at Coventry, at Plymouth; look at Lübeck, at Rostock, at Cologne! And the slogan: "Air power conquers, land power occupies."

"For, once we have demolished every city in Germany," says Bomber Command, "all that you soldiers need do is to catch the Golden Arrow and the

Orient Express." Fortunate P.B.I.—yes! Nevertheless, unfortunate P.B.P.; for this time it is the poor bloody public who take it in the neck.

I predict that, outside another Thirty Years' War or war of that type, this solution has no greater chance of success than had its predecessor—the artillery battle—because mobility cannot be reinstated by creating rubble heaps, any more than, in 1916 to 1917, it could by creating crater areas. That, instead, once again the correct solution is to be sought in combining the new and the old; this time—velocity in the air with comparative stability on the ground.

Battles are not beaten into victories by hammers alone, or on anvils alone, but by hammers on anvils. Air power must, therefore, be linked to sea power and land power, if within any reasonable time we are to win through.

What, then, is the first thing the R.A.F. should do? Cease to be one-eyed like Polyphemus, and become two-eyed like Ulysses. Cease to be air-minded and become war-minded; for air-mindedness simply means bomb-mindedness, and bomb-mindedness is Somme-mindedness.

There is nothing new in this, for it is the very common-place of tactics. Fighting has always centred in the problem of how best to combine mobility and stability—lever and fulcrum; Alexander the Great's Companion cavalry and phalanx at Arbela; Edward III's men-at-arms and archers at Creey; Frederick's cavalry and infantry at Rossback; Napoleon's infantry and artillery at Wagram; our own tanks and infantry at Cambrai, and now in this war the air arm with armoured land and sea power.

When we place first things first and examine the problem of war in the order of first things first, second things second, and so on, as if by the wave of a magician's wand there rises before us the vision of a true plan of war. All we need then do is, substantially, to fill it in. Not to expend a single man-hour of work, a single ton of steel, a single barrel of oil or any other commodity on secondary and tertiary things until first things have been satisfied. When they are, then secondary things will step up one rank and tertiary will follow suit. This is the sole certain way not only of making the best of the best, but also the best of the worst; for the law which governs war is economy of force, sometimes also called common sense.

February 8, 1943.

IX

THE IDEAL TANK FOR OUR ARMY

IS IT POSSIBLE TO BUILD AN IDEAL TANK? CERTAINLY, FOR ANY WEAPON WHICH gives the highest tangible expression to what, at the moment, is the paramount tactical idea, is such.

For instance, had the original Mark I tank been mechanically more reliable, and had it been armoured to withstand a field gun H.E. shell fired at over 1,500 yards range, in spite of its low speed, it would have been an ideal weapon, because the paramount tactical idea of the last war was to carry a slow-moving infantry line through an entrenched position.

As it actually was, and with all its shortcomings, the Mark IV tank at the

Battle of Cambrai fell but little short of the ideal. It did what it was designed to do: in less than twelve hours it carried the infantry through five miles of some of the strongest field entrenchments ever built!

Not content with the above tactical idea, the Tank Corps put forward a very different one for 1919—namely, to attack the enemy's rear before attacking his front, so that the foundations of his front might be knocked silly when the time came to assault his front.

To give expression to these tactics, the Tank Corps Design Department—following specifications laid down by the Tank Corps G.S.—set to work on a tank which would enable this idea to be realized. That tank was called the Medium D, and its specifications were: maximum speed twenty m.p.h.; circuit 150 to 200 miles, and spanning power thirteen to fourteen feet. Had it been built in time, and had it proved reliable, and had the war continued into 1919, then there can be little doubt that it would have actualized the above idea, and, by doing so, have revolutionized tactics.

So much for the background; so now for the foreground—war as it is to-day, and not as it was in 1917-1918 or might have been in 1919.

What should our ideal tank be like? This question, and I hope I have made it clear, depends upon our leading tactical idea: What is our problem, and how are we going to solve it in a reasonable time with the means—military and industrial—at our disposal? Further, where do we think we can best solve it, because theatres of operations differ widely? A machine which is ideal in Libya will not necessarily be so in Russia or the Balkans. . . . Shoes are footgear, nevertheless, pumps are not hobnailed boots.

Here we are faced by an enormous problem, a veritable cornucopia of problems, which, in actual fact, can only be solved by the C.I.G.S. and his Staff, for they alone possess the necessary information.

Nevertheless, anyone with a tactical eye can make a provisional shot at what our ideal tank should be like, and here is mine:

First, it should fit the tactical situation which is likely to face us when it is built. Though no man can be certain of what the future holds in store, the chances would appear to be that the Germans will, more and more, be thrown on the defensive. This means that, progressively, they will turn to all possible methods and means of resistance—field works, minefields, artillery, and antitank weapons both on land and in the air. Therefore our ideal tank should be built more for siege than for field warfare; consequently its speed should be secondary to its armour.

Its first characteristic is, therefore, powerful armour, armour of, let us say, 100 mm. (4-inch) covering its vital parts. Though this is the answer to the shell, it is, nevertheless, no answer to the land mine and air bomb.

In order to mitigate the effect of the first, I suggest that our ideal tank should run on multiple tracks, so that, should one track be broken, at least one other—on either side—if undamaged can come into immediate operation. Or, and I do not know whether this is possible, track plates and their joints should be made of such a thickness of steel and be sprung so flexibly that the small anti-tank mine at present used will prove ineffective.

In order to mitigate the power of the second—air bombs—I suggest that a detachable armoured umbrella be experimented with, in order to ascertain whether

such a shield would effectively protect the tank. My idea is, not that it should be bomb-proof, but that it should act as a burster—that is, it would detonate the bomb at a distance from the tank (the first tanks ever made were fitted with something like this to protect them against hand grenades). Should such direct protection be found to be impracticable, then I consider that a multiple anti-aircraft machine gun should be mounted in the main turret.

So far its protective characteristics, now as regards its offensive and others. Though, as I have pointed out, speed should be secondary to armour, it should, nevertheless, be reasonably high, say, 20 miles p.h. on the level, which would give it a cross-country average of 10 to 12. The machine should possess great reserve power to enable it to negotiate broken ground.

Obviously, it must be as reliable as possible; yet, what tank designers

frequently overlook is that it must also be as comfortable as possible.

Every important part should be easily get-at-able.

Its circuit of action should not be less than 100 miles, its spanning-power not less than 14 feet, and its armament should consist of one turret-mounted high velocity gun, such as the 75 mm., one 6-pdr., one or two machine-guns as well as its A-A battery.

Granted that such a machine is the ideal we should aim at, a moment's consideration will show that, in actual fact, it does not solve our tactical problem

in its entirety; and, to take a naval simile, this is the reason why:

Whereas in the sixties of the last century one armoured battleship could have sunk a whole fleet of wooden three-deckers, once armoured battleships were confronted by their like, their full powers could only be developed by developing or designing auxiliary vessels, such as cruisers, destroyers, minesweepers, etc.

Correspondingly on land, what we should aim at to-day is not solely an ideal tank, but above all an ideal tank organization. Therefore we do not want a general purposes machine, but instead a special purposes machine, the master-

weapon as it were of a general purposes tank organization.

For instance, as our ideal tank will, in all probability, have to land on a hostile shore, we want amphibious tanks to establish a bridgehead for it. Once it is landed, we want much lighter and less powerful machines to reconnoitre for it. When it is launched into attack, we may want mine exploding machines to clear a path for it, also artillery tanks to batter down concrete emplacements; also A-A tanks whose duty is to deal with dive-bombers, also bridging tanks, which will assist it overwide trenches, streams, canals and rivers. Further still, we shall want armoured infantry transporters, which will rapidly and securely bring infantry forward to hold the defences our ideal tank has conquered, and finally pursuit tanks to exploit the break-through.

All these machines go to build up a tactical organization, a combination of powers, each one of which adds to the powers of our land battleship by sub-

tracting from its limitations.

Such, in brief, is our ideal tank problem—the master-machine and its satellites.

In 1918, we were in the process of building-up such an organization, and, be it remembered, the Tank Corps was, then, but two years old! The Medium D. was our ideal machine in theory, and to assist it in becoming so in fact we had already built or were building the following auxiliary machines: a 6-in.

howitzer or 60-pdr. tank, two types of mine-exploding tanks; a lethal gas tank; a smoke-generating tank; a 6-in. mortar tank; a salvage tank; an R.E. tank; a bridging tank, a torpedo tank; a supply tank and a tank infantry carrier.

In ideas at least, though not in mechanical perfection, the old Tank Corps Headquarters of 1918 were 30 years in advance of their day. In 1919, had the war continued, we should have exploded the enemy's anti-tank mines mechanically; at El Alamein, in 1942, they were grubbed up by hand!

Certainly let us design an ideal tank, but still more certainly let us fashion an ideal tank organization. The means are not only iron and steel, shot and shell, petrol and grease; for let us never forget that the spark which detonates all these material things into the perfect war machine is the idea in the head of some foreseeing genius—something intangible, unweighable and unbuyable.

March 3, 1943

X

MONTGOMERY

WHEN THE BOMBS HAVE CEASED FALLING AND THE HISTORIANS GET BUSY, IT IS safe to predict that, whatever yet he may do, the name of General Montgomery will bulk large in their histories, for not only was his victory of El Alamein a turning point in the grand strategy of the war, but it was also a classic example of the tactics of penetration.

Had he been vanquished instead of being victorious, and had Egypt been lost, the whole character of the war would have been changed. As the reverse was the case, in strategical importance the battle of El Alamein will be bracketed with Nelson's victory of Aboukir. Whereas the one, fought in 1798, ruined Bonaparte's invasion of Egypt, the other, fought in 1942, put a full-stop to Rommel setting foot in Alexandria.

Here, however, I am not concerned with grand strategy, for it is the province of Governments and their General Staffs. Seldom does it pertain to a general in the field, unless, like Frederick or Napoleon, he happens to be the head of his State as well as of his army. My inquiry into General Montgomery's generalship is, therefore, circumscribed by tactics, and how far was it he or his chief, General Alexander, who determined them is beside the point, for it may be accepted that together they worked hand in hand.

When, about the middle of August last, Montgomery took over command of the Eighth Army, though Rommel was then firmly held, the position he found himself in was far from an enviable one. First, his army was still largely unequipped; secondly, though he had some pre-war experience of soldiering in Palestine, he was new to desert warfare, and thirdly, he was faced by an extremely adroit desert fighter. Nevertheless, though within a fortnight of his assuming command Rommel attacked the left flank of his army, on September 4th he was forced to retire. Thus Montgomery won his first battle—a purely defensive one.

Before we turn to his offensive masterpiece, I would like to say a few words on battle tactics generally.

The two grand manoeuvres most frequently employed are envelopment and penetration. Envelopment may be single or double—that is, either one or both of the enemy's flanks may be turned. The classical example of the double envelopment is Hannibal's battle of Cannæ, fought in 216 B.C. Yet there is another battle of which much less is heard, a battle as archetypal of all battles of penetration as Cannæ is of double envelopments—namely, Alexander the Great's victory over Darius at Arbela. Whether Generals Wavell and Montgomery were aware of it or not, both their noted victories, Sidi Barrani and El Alamein, were based on its leading idea.

At Arbela, in 321 B.C., Alexander, at the head of 45,000 men, advanced diagonally against the left centre of the Persian army, reputed to number 1,000,000. When closing in on it, he formed his troops in arrowhead formation: his heavy infantry on his left, his light troops on his right and his heavy cavalry, massed in a wedge, in the centre. Noticing a weak point in his enemy's front, he charged it with his wedge, broke through, chased Darius from the field, and then, wheeling his horsemen to the left, took the Persian right wing in reverse. The result was panic.

At Sidi Barrani, it will be remembered, Wavell discovered a weak point in Graziani's right centre. In turn, he swept through it and took his enemy's left wing in reverse, when the Italians surrendered by tens of thousands. At El Alamein Rommel's¹ front was as solid as he could make it. It was stretched between two obstacles, the Mediterranean and the Qattara Depression, neither of which could be turned, and its left flank was far stronger than its right.

Strange as it may at first seem, it was this strong left which Montgomery decided to penetrate. But, on second thoughts, it will be seen that he was right; for should he succeed in doing so, his own right flank would be protected by the Mediterranean. Had he, instead, selected his enemy's centre, once through, both his flanks would have been open to attack.

Further, a successful penetration of the enemy's left would so place the Eighth Army that it could attack Rommel's right wing in rear and simultaneously cut it off from the coastal road—its sole line of retreat—and so force its capitulation.

What to do is one thing, to do it quite another; for battles are fought on the ground, and not in the imagination. Rommel's whole front was protected by a deep belt of mines, and on his left flank this belt was duplicated. Had the battle, about to take place, been fought instead in 1919, General Montgomery's problem would have been comparatively an easy one, for then he would have been provided with tank mine-busters. But, strange to say, so essential a weapon for armoured warfare seems long to have been forgotten. So, instead, he had to resort to 1917 tactics, and he did so in a masterly way.

What were those tactics? To cut the enemy's entanglements by artillery fire and then advance the infantry under a rolling barrage. In 1942, the sole difference was to bombard the enemy's minefields by flying artillery, for the infantry, accompanied by sappers, who grubbed up the mines, advanced exactly as they had done twenty-five years before.

¹ See footnote, page 16.

This antiquated-modern attack was launched at 9.30 p.m. on October 23, when 400 guns opened fire on a narrow front of six miles. Taking all in all, its progress was rapid. Nevertheless, it was not until the night of November 1-2—nine days after the attack was launched—that the second minefield was finally penetrated. During these nine days General Montgomery must have spent many an anxious moment wondering whether his enemy would stand where he was or instead withdraw. For were he to fall back, the Eighth Army would crash into a tactical vacuum, when at any moment, and before it could reorganise, it might be counter-attacked.

Now, in armoured warfare, there is one thing you should never willingly do, and that is to stand still. And if, by force of circumstances, you have got to do so, even when behind a belt of defensive works, you should remember that, as in armoured fighting the initiative is 90 per cent. of victory, directly your enemy seizes it you should either attack him or retire, for nothing is more risky than to await his assault. Had the Eighth Army been equipped with tank mine-busters, Rommel would never have had time to get away; but, as it was not, he had nine days to think things over in. Why, then, did he not withdraw?

Without further information it is impossible to say. But at a guess my suggestions are: either he did not realise the danger of standing still; or he was forbidden to fall back; or, having but recently proclaimed that he had "the Gates of Egypt in his hands," he did not like to eat his words.

Whatever the reason may have been, the result was that he was out-generalled. Not only had his opponent selected the one and only point in his defences where a decision could be gained, but, when at Tel El Aqqaqir—immediately west of the point of penetration—he did concentrate his three armoured divisions against Montgomery's 10th Corps, he had to fight for his communications, instead of being free to concentrate the whole of his attention and means on smashing his enemy. In short, he was outmanœuvred as much by his own lack of caution as by his adversary's audacity.

What resulted, we all know—namely, one of the most tremendous pursuits in recent times—an unbroken chase of 1500 miles (as far as from London to Moscow, or London to Constantinople!) That this was possible reflects even higher credit on Montgomery's generalship than the battle itself, for no operation of war is more difficult than a sustained pursuit. Also it reflects the highest credit on General Lindsell, in charge of administration, Middle East, for on him fell the full burden of supply. And as General von Ravenstein, commanding the 15th Panzer Division, who last year was captured, has remarked: "Though the desert is the tactician's paradise, it is the quartermaster's hell!"

March 11, 1943

XI

THE VOLGA AND THE DON

THE PROBLEM OF CROSSING A RIVER IS ONE THAT SHOULD INTEREST US, FOR IN at least one respect it resembles an overseas invasion; in both a stretch of water has to be crossed, and in each the means employed are not so very different. How is it done? One day we learn that the Russians have jumped the Donetz, and then on the next that the Germans, seemingly, have taken back that river in their stride.

Before answering this question, which is not quite so simple as it may at first appear, I will turn to rivers generally, for two fallacies concerning their military values are frequently held. The first is that they constitute secure political frontiers, and the second that, as tactical obstacles, they form strong lines of defence.

As regards the first: this opinion will at once be reversed when it is appreciated that a river is seldom a suitable national boundary, because, as it is nearly always a natural thoroughfare, people of the same stock or language generally inhabit both its banks. As regards the second, though it is true—more so in the past than to-day—that a broad river, such as the Don or Volga, is a formidable obstacle, it is not always realized that, when the length held is considerable, a river is generally more difficult to defend than to attack.

Napoleon explains why in a despatch sent to his step-son Eugène, on March 15, 1813: "Nothing is more dangerous than seriously to attempt to defend a river by holding the bank opposed to the enemy; for directly he forces a crossing as he always succeeds in doing, he finds his adversary extended in a thin defensive order, and, therefore, incapable of concentrating his forces."

Though this holds good whether an army is mechanized or not, in present-day warfare the advantage is more than ever on the side of the attacker. This will be appreciated directly it is grasped that a no mal river line held in length is nothing more than a liquid Maginot Line. Therefore, as happened in France in 1940, once the attacker has forced a crossing, all he need do is to fan outwards and roll up the defenders on each side of the point crossed, as if they were two long strips of carpet.

Two problems emerge from this picture. The first is: how, then, should a riverline be defended? And the second: how does the attacker force a crossing?

As regards the first, obviously the defender will either demolish such bridges as exist or hold them. Obviously, also, he will place outposts on the river itself and keep it under constant air patrol. Nevertheless, as he is seldom certain where the attacker will strike, he is compelled to group his reserves well in rear of his outposts; yet, if possible—which is by no means always feasible—not so far back that, should a passage be forced, he is unable to counter-attack as the enemy is crossing. When, during the American Civil War, General Hooker informed President Lincoln that he thought of crossing the Rappahannock, Lincoln pointed out this very danger, saying: "In one word, I would not take any risk of being entangled upon the river, like an ox jumped half over a fence and liable to be torn by dogs front and rear, without a fair chance to gore one way or kick the other."

Let us now turn to the second problem—how does the attacker force a crossing?

In times past, an opposed crossing was always covered by concentrated artillery fire. Whenever possible a loop in the river—the bend of which faced the attacker—was selected and converging fire brought to bear on it. Under protection of this bombardment infantry were rowed or rafted over. Thus a bridgehead was established on the far bank, and under its cover the bridge was built. When, on the night of March 22-23, 1938, General Franco, in the vicinity of Quinto, forced a crossing of the river Ebro, he selected just such a loop.

To-day, the means at the attacker's disposal are far more elaborate. First, having at his call a motorized bridging train as well as motorized troops, by switching them this way and that under cover of night, he has far greater latitude to feint and to force a surprise crossing. Further, by dropping paratroops on the enemy's side of the river, he can frequently begin to establish a bridgehead before a single foot soldier has crossed. Further still, and this is his greatest asset, he can concentrate his bombers—his flying artillery—on the point to be forced, and under cover of a fighter umbrella protect them and the motorized artillery he brings forward to supplement their bombardment.

As is the rule in the attack, because the initiative is the attacker's, therefore time is on his side. This simply means that, because he knows where and when he is going to attack, whereas the defender has to wait until the blow falls, the attacker has more time to strike in than the defender has to guard in.

This introduces an exceedingly interesting question: how came it last autumn that the Germans were unable to cross the Volga? Could they have done so, during or immediately after their first assault on Stalingrad, that city would almost certainly have fallen to them, for it would have been cut off from reinforcement.

The answer to this question must be sought in the three determining factors in all opposed river crossings—namely, time, space and surprise. It will be remembered that last summer, after occupying Kharkov, the Germans launched a tremendous attack on Voronezh, but failed to push eastwards from that city towards Saratov. Thereupon they turned south, and, with the Don on their left flank, poured down on Voroshilovgrad, where Field Marshal von Bock's army swung eastwards on Stalingrad, whilst another army, continuing south, forced the evacuation of Rostov and then overran Caucasia to within a few miles of Grozny. After much fighting, von Bock crossed the elbow of the Don and lay siege to Stalingrad with his flanks resting on the Volga a few miles north and south of that city.

What prevented him from crossing the Volga was that the river frontage at his disposal was so restricted that he had no choice of crossing places. Space was, therefore, against him, and in consequence it favoured the Russians. Further, the river was so broad—two or more miles—that, even had a suitable crossing point been found, the time taken to bridge it would have prohibited surprise. Therefore time was also against him, and in consequence it also favoured his enemy.

Instead, had the attack on Voronezh proved successful, and had the Germans been able to occupy the west bank of the Volga between Saratov and the northern outskirts of Stalingrad, they would have had well over 200 miles of river front to manœuvre behind. This would have enabled them, by a series of feints, to have forced the Russians to break up their reserves into several groups, when, in spite of the breadth of the Volga, von Bock might have gained a crossing at one or more points before they could concentrate sufficiently powerful forces to drive him back.

Thus, astonishing as it may seem, I think history will decide that because Voronezh blocked the road to Saratov, Stalingrad was saved. Further, because Stalingrad could not be turned, it was able to resist, and, because it was able to do so, it prevented the Germans fighting their way northwards up the Volga, and because they were unable to fight their way, their left flank, which straggled back along the Don to Voronezh, was on its whole length open to counter-attack directly that river vanished as a river and became a roadway of ice.

Frost and Voronezh were the hinges upon which the great Russian winter offensive of 1942-43 swung; the story of two rivers—the Volga and the Don.

March 12, 1943

XII

TOWARDS THE IDEAL ARMY

TO BEGIN WITH, LET ME ASSURE MY READERS THAT THIS IS NO JULES VERNE'S story; for most of the parts of my ideal army already exist; therefore, all we need do is to make good those which do not, and then assemble the whole. Had we set to on this task immediately after Dunkirk, to-day we should possess such an army, and, size for size, it would be several hundred per cent. superior to any which so far has taken the field.

True we and our allies may win the war with our present confused masses of armed men and pugnacious ideas; yet it should not be overlooked that, unless during it, we test out something better, as the Germans proved out their newer weapons during the Spanish Civil War, we shall not have made the best use of our chances.

Further, like a machine, an army should not be put into production straight off the drawing board; for it requires trials and tests.

This comparison with a machine, it seems to me, is the clue to the whole problem, and should I be right in this, then it follows that our ideal army must be planned like a machine. Accepting this as our datum point, let us first see how a machine is conceived and developed.

It emerges from an idea; what we want it to do. Therefore, its object is the fulfilment of this idea, or, as Foch once said, "The military art is not an accomplishment, an art for dilettante, a sport . . . Everything in war is linked together, is mutually interdependent, mutually inter-penetrating. . . . Each operation has a raison d'etre—that is, an object; the object, once determined, fixes the nature and the value of the means to be resorted to, as well as the use which ought to be made of the forces."

Such is the kernel of our problem.

What, then, is the object? The object of an army is by physical force to

compel the enemy to accept the policy he is resisting. And the ideal method is the one which entails the least loss of time and destruction.

Next, what happens as regards the machine? It is designed to fit certain conditions, such as place, fuel, man-power, and, above all, the materials used in its construction. Lastly, its designers consider what parts are already in existence, what existing parts must be modified and what altogether new parts must be made.

These things decided upon, the draughtsmen get busy; blue prints follow, then jigs, gauges, and tools; next forgings, castings, and machinings; finally, all parts are assembled and the machine is tested out. Such, in brief, is its

history from germ to salesroom.

Surely, then, the construction of an army should follow a somewhat similar course. Yet it seldom does, for a planned army is the rarest of military rarities. Looking back on the development of army organization, we find it all but an unbroken sequence of blind improvisations. The tree of war is seldom pruned; the old wood crowds out the new and with few exceptions only the gales of battle bring the dead and dying branches crashing to earth in expensive victories and costly defeats.

From the object I will next turn to the conditions which govern design. The first and key condition is that, as we inhabit an island, our Army has either to be transported over the sea or through the air. Shipping is, therefore, its yard-stick; for once we have decided how many units are required for home defence, to build more than our ships and aircraft can transport and maintain

overseas is a sheer waste of force.

Sea and air transport, therefore, dominate the whole problem, and as ships sail from ports, and as the bulk of our invading army must be disembarked at a port, it follows that the protection and occupation of ports are the next problems.

When we do invade, are we going to do it à la William the Conqueror? For if so, then we may expect a Dieppe of staggering size. If not, it is obvious that two things are required, the one is armoured protection whilst landing, and the other is the cutting off of the enemy's coastal defences from reinforcement—their isolation.

The first of these problems demands the introduction of amphibious tanks, not machines which merely float, but which can propel themselves over wide stretches of water.

The second demands powerful forces of airborne troops—the light cavalry of the air—which, by leaping the enemy's coastal defences and descending on their rear, play havoc with their communications. Thus, as the seaborne invasion is pushed, the enemy's coastal defences are boxed up and isolated.

Once a footing has been gained there must be no pause, no halting to establish a conventional bridgehead. Instead, a lightning advance must be made, under cover of the "electric" shocks of which the base of disembarkation is organized.

As the key to this phase of the operations is velocity of movement, it is essential to push forward masses of armoured and motorised troops. And as the enemy will obviously hold all centres of communication—towns, villages, road junctions, etc.—unless these mobile forces can be supplied across country as well as by air, their momentum will soon peter out. As things are to-day, they will be compelled to fight for their communications, by either storming or laying siege to these road obstructions.

This will cause endless delays, and thus will the enemy gain time to concentrate in—the one thing he should be prevented from doing. Therefore all transport feeding these armoured forces should be road-free—that is, supply vehicles must move on caterpillar tracks and not on wheels.

From this brief examination of a few of the leading conditions which influence the construction of our ideal army, it will be noticed that the outstanding deficiency in our present organisation is lack of mobility in its several forms—protected movement from sea to shore; airborne fighting power,

cross-country and airborne supply.

When we add to these essentials those of offensive power, which embrace the armoured, motorised and marching land forces, and the reconnaissance (flying scouts), bomber (flying artillery) and fighter (flying light infantry) air forces, in order to establish unity of direction, correct distribution and concentration of forces, which, when combined spell economy of force, in structure our ideal army becomes cubic.

It has forces which can move in all directions—linearly, superficially, and spacially; forces which for their maximum efficiency depend upon each other. Clearly, then, our ideal army is no longer in the conventional sense an army at all, nor an air force at all, nor even an army and air force in co-operation.

Instead, it is the precipitate of both; an air-army, an integrated force, a new fighting compound and not merely an amalgam. In its command, war-mindedness replaces land and air-mindedness and becomes single-mindedness.

In the past, whenever fighting power has been planned, it has astounded its generation. The first and still greatest of all the military planners was Philip of Macedon, and with his planned army his son, Alexander the Great, conquered the known world of his day. Edward III was a tactical planner, so was Gustavus Adolphus, and Cromwell. Napoleon was not—except perhaps as an artillerist—neither was Wellington; yet it was because Sir John Moore planned his infantry for him, that Wellington's infantry beat every infantry they met.

To-day and on a vastly larger canvas we should paint in modern colours the picture these great artists of war painted in ancient hues.

Yet, if we are to do it, we shall have to overcome the obstacle of petty men obsessed by petty sectional ideas, prejudices, and interests. It is only ruthless men who can carry out such an integration as I have attempted to describe—never the homunculi.

March 17, 1943.

IIIX

ROMMEL

THE QUIP THAT, "IF ROMMEL HAD BEEN IN THE BRITISH ARMY HE WOULD STILL be a sergeant," flies wide of the mark, not only because in 1910 and at the age of eighteen he was gazetted a 2nd Lieutenant in the German Army, but also because, after the last war, his extreme political opinions would not have been tolerated in any sergeants' mess.

In these two facts, service in the regular German Army from 1910 to 1919, and service in Hitler's stormtroops from about 1922 onwards, is to be discovered the secret of his generalship—namely, military experience combined with revolutionary fervour.

Generals of the Rommel type have always flourished in revolutionary times, such as the French Revolutionary Wars and the American and Russian Civil Wars. In these conflicts leaders like Bonaparte, Sherman and Toukhatchevski appear; men who drilled as soldiers, nevertheless refuse to kow-tow to conventional drilling.

Though in each upheaval the type differs, all have certain characteristics in common. They are extreme individualists; they accept risks which are forbidden by the rules of war, they create situations which a normal general would assiduously avoid, and when they move, it is nearly always as if Satan were on their tails.

For instance, Bonaparte, in 1796, at the head of an armed rabble plunges into Italy, making more use of his soldiers' legs than of their arms; Sherman, in 1864, cuts loose from his communications and literally burns his way through Georgia and South Carolina; in 1919, Toukhatchevski, having defeated Admiral Kolchak at Busulug, sets out from the Volga and pursues the remnants of his army to Vladivostock! As we shall soon see, the itch to move coursed also in Rommel's yeins.

Though an infantryman by service, and the author of an infantry manual, he was instinctively attracted to the tank, for its speed and its revolutionary characteristics vastly appealed to him.

In France he commanded a Panzer Division: took part in the break-through near Sedan, and captured St. Valéry-en-Caux and the greater part of our 51st Division.

Later, on the sandy shores of the Baltic, he built up his Afrika Korps, and, if reports are to be believed, conditioned his men by baking them in hothouses.

No, he was not the type of man to have remained a sergeant in any army, ours or another, and Mr. Churchill I think is right when a while back he said of him: "We have a very daring and skilful opponent against us, and—may I say across the havoc of war?—a great general."

So far as we are concerned, his name first appeared in the headlines on February 26, 1941. A few weeks earlier Marshal Graziani had been smashed by General Wavell, and for a fortnight our outposts had occupied El Agheila, on the Gulf of Sirte. There, on the above-mentioned date, a skirmish with German tanks was reported—something new. Then nothing further happened until March 31, when a veritable whirlwind was let loose. On April 3, to our consternation we learned that Benghazi was lost, and nine days later that Bardia had passed into German hands. Such was Rommel's tactical introduction to us. In thirteen days he covered some 500 miles—that is, on the average of a little over thirty-eight miles a day!

Nothing much happened until November, when, on the 18th of that month, General Cunningham launched his attack. Rommel—who it would appear was himself only forestalled from attacking by a few days—was certainly surprised. Nevertheless, unlike Graziani, he recovered from the initial shock with surprising quickness—not for a moment does he seem to have lost control of his troops. Much confused fighting followed; Tobruk was relieved;

Benghazi was reoccupied on Christmas Eve, and Rommel was forced back to his original starting point—El Agheila.

Considering that the Italo-German losses must have been exceedingly heavy, more especially so in transport, it certainly redounds to Rommel's pugnacity that, a month later—to be exact, on January 23, 1942—he moved out of his lair, advanced 145 miles in three days, once again drove us out of Benghazi, and, on February 8, was brought to a halt a little west of Gazala. This time his average daily advance was twenty miles, and a point well worth noting, as a correspondent did at the time, is that he "took his forces right from the Tripolitanian border to the coastal plains of Marmarica almost entirely without air support and in the teeth of strong, skilful and sustained R.A.F. attacks."

Considering that he was now some 800 miles from his main base of supply—Tripoli—it certainly stands to his credit that only three and a half months elapsed before he once again was on the war path.

This campaign, which opened on the night of May 27, I do not intend to describe it, saw the fall of Tobruk and petered out on June 30 at El Alamein, some 60 miles west of Alexandria. Instead, I will turn to his generalship.

Throughout these several campaigns it would appear that he never worked on a rigid preconceived plan, but instead on rapid decisions governed by changing circumstances.

Instead of working on detailed orders, his armoured troops had been taught to elaborate their actions from simple ideas and in accordance with a few simple rules, such as: move dispersed and fight concentrated (strictly Napoleonic); never yield ground unless driven from it (strictly Wellingtonian); hold with anti-tank weapons in front and flanks, with tanks in rear; do not engage in tank versus tank fights, if they can be avoided; manœuvre against infantry at every opportunity; move under cover of sandstorms, and when possible with the sun in the enemy's eyes; battle messages in clear and not in cypher, and air power to be at the immediate beck and call of land power. In short, the secrets of his tactics were to make fuller use of intelligence than of obedience; to impregnate his soldiers with his own ideas, and then to leave it to the men on the spot to elaborate them. Last, but not least, to be on the spot himself whenever that was possible.

What followed the Eighth Army's retreat to El Alamein and the crushing defeat Rommel sustained there between October 23 and November 3, last year, is such recent history that there is no need to dip back into it. Yet one point is worth returning to, since it reflects on Rommel as a general. It is: why did he await Montgomery's attack?

Right through, and as regular as clockwork, from Graziani's defeat in December, 1940, onwards, each side which first seized the initiative and attacked, won its round; and each side which failed to do so, lost its round. In a recent article in this paper on Montgomery's generalship I suggested certain possible reasons why Rommel did not retire.

To them I will now add another. It is possible that the persistent attacks made by our fleet and our air force on Rommel's sea communications so

See footnote, p. 16.

crippled his petrol supply that he had not enough to withdraw his whole army in one bound.

Naturally, I do not pretend to know what his actual strength was, or what reserves of petrol he had in hand. But I can say this, that if his army numbered 150,000 men, including three Panzer Divisions, then, at the very lowest computation, he needed 2,000 gallons of petrol to move them in the transport such a force would have each furlong of their retreat. As he had 250 miles to go, in order to reach his next best halting-place—Sollum—the tonnage of petrol he needed was enormous, and, possibly, only by sacrificing half his army was he able to get the other half away.

Nevertheless, in spite of General Montgomery's November 5 remark to War Correspondents that, "The Boche is completely finished in North Africa," Rommel, though down, was by no means out. "Damnably mauled," as the Duke of Wellington would have put it, in spite of his enemy's overwhelming superiority in the air, and in spite of the fury of the pursuit, Rommel carried a not inconsiderable portion of his army 1,500 miles back into Tunisia, and there, to-day is still very much unfinished.

"We will give him a bloody nose," and "Caught like a rat in a trap," though they make catchy headlines, seem to me a little out of place in a general order. Personally, I prefer our Prime Minister's more chivalrous conclusion: "A very daring and skilful opponent... a great general."

March 24, 1943.

XIV

WHY NOT DIG UP THE MUMMIES?

"OH! WHERE AND OH! WHERE HAVE OUR ARMOURED BATTLES GONE?" WHETHER this ditty is popular with our High Command I have no idea: yet the question asked demands attention, for on its answer will depend the tactics of our much advertised final.

To go one better than Cæsar by daily acclaiming, "Veni, Vidi, Vici," before instead of after the event, may, in these Vermouthless days, be a stimulating aperitif; but do not let us mistake it for the dinner itself. Further, let us remember that cooking the dinner is far more important than cooing the cooks.

In 1939 we watched the Germans sweep over Poland; in 1940, over Denmark, Norway, Holland, Belgium, and France; and in 1941, over Jugoslavia and Greece and then into Russia. For two years we have watched them surging forwards and backwards in North Africa, where also we have done no little surging ourselves.

And now Douglas Brass, the war correspondent of this paper, tells us that, "The Mareth battle developed into Flanders stuff," as, in Russia, the Stalingrad battle developed into Verdun stuff. To-day the slogan is once again, "On ne passe pas;" it is no longer, "On passe partout."

Is this change permanent or is it temporary? Is it due to special or to fundamental causes? Has the tank been tonquered or is there somewhere a

mistake? On the answers to these questions will depend the future of our tactics, both armoured and unarmoured.

When, on November 11 last, Mr. Churchill addressed the House of Commons, this is what he said about the battle of El Alamein: "In the last war we devised the tank to clear a way for the infantry, who were otherwise held up by the intensity of machine-gun fire. On this occasion it was the infantry who would have to clear the way for the tanks to break through and liberate superior armour." And a little later on he added: "This battle is, in fact, a very fine example of the military art as developed under modern conditions."

With all deference to the Prime Minister's tactical opinions, I should have said "antiquated conditions," and for the simple reason that, between 1919 and 1942, the problem of neutralising the anti-tank mine was not considered. Had it been, as it was by the Tank Corps during the last war, it would have been unnecessary at El Alamein to have moved forward large forces of infantry, to clear a way for the tanks, because the Eighth Army would have been equipped with mine sweepers.

Then, instead of taking nine days to clear a lane through the minefields, the time taken would have been less, possibly no more than nine hours. At the battle of Cambrai a complete penetration was effected by slow-moving Mark IV tanks in about ten hours, and the depth penetrated was 9,000 yards, and not 6,000 as Mr. Churchill has informed us it was at El Alamein.

Therefore, I think it may be accepted that, had the missing link—the mine buster—existed, El Alamein would have been a blitz battle of a startling kind.

Let us now turn to the Mareth battle. The problem differed in that there ran through Rommel's minefield a natural Hindenburg Line, the Wadi Zigzau. It is a deep nullah with precipitous sides, therefore an impassable tank obstacle until those sides are ramped down by pick and shovel.

Not at all, for I am one of those soldiers—still somewhat rare—who believes that there is practically no physical problem which mechanical and electrical engineering cannot solve. This particular one, in an amateurish way, I solved over ten years ago.

First, it will be noticed that it is a very old problem, much older than the siege of Troy. Secondly, like so many siege problems, the solution centres in producing a modern edition of the scaling ladder.

In former days, when the walls of a city could not be battered down, what did the attackers do? They first built wooden towers from the tops of which, by flights of missiles, they drove the defenders off their ramparts. Then they rushed forward their scaling ladders and, swarming up them, established a "bridgehead."

Thus Alexander the Great took Tyre in 332 B.C., and thus did the American General Winfield Scott—minus towers—storm Chapultepec in 1847. Incidentally, the last time I know of wooden towers being used was in 1781, when, by means of them, the Americans were able to storm our stockade round Fort Ninety-Six. It is also of interest to note that, that same year, Marion, the Swamp Fox, took Fort Motte from us by inundating it with flaming arrows. Nothing much new in war, is there?—not even flame-throwers.

In ideas—no; in means—yes. The Mareth problem, so it would appear

hinged on the attacker's ability to climb down and up a precipice. As the defenders were sitting on the far side of the Wadi Zigzau with a lot of tanks, and as infantry in the open are no match for tanks, obviously the wrong way to assault it was with infantry, and the right way with tanks.

But this was impossible because General Montgomery had no tank-scaling ladders. Therefore, as at El Alamein, he was once again reduced to fall back

on 1917 tactics, and this time they failed him.

It will be remembered that in 1932, during the Disarmament Conference, there was a lot of tongue-in-my-cheek talk about big and little tanks. The first were proclaimed to be offensive weapons, because they could cross wide trenches, whereas the second were innocent, defensive little things. This argument was raised because Germany had no tanks and we and the French did not want to go to the expense of building big ones. It was not a tactical argument, it was a piece of financial humbug.

To prove that—so far as agility is concerned, such as trench crossing and climbing walls—the small defensive machine, so ardently approved of by our financially-minded delegates, could be made far more offensive than the biggest then existing, of which, to be precise, we possessed exactly one; I had

a working model of a bridging and climbing tank made.

It was driven by a sewing machine motor, and in principle it resembled a rack railway. Not only could it cross a trench twenty-five feet wide and any number of such trenches in succession, but, by means of pinions, it could climb up its rack, even when held in a vertical position. Therefore, it could climb the face of a wall, and, with a few adjustments, it could have climbed down the opposite face also.

Technically, and as a stunt performance, I see no reason why it could not be made to climb to the top story of the Woolworth Building in New York, and then creep down again. After all, that skyscraper is only 760 ft. in height, a mere bagatelle when compared to a mountain railway. For instance, I have travelled on the one running from Massawa to Asmara, in Eritrea: it rises

7,000 ft.

Faced by a deep moat like the Wadi Zigzau, this is how I visualise a battle such as that of the Mareth Line being fought: The rolling towers are replaced by bomber forces and the catapults and battering-rams by present-day artillery. Under cover of a rolling barrage the mine-busters advance, and behind them come the scaling tanks, followed by mine-laying tanks—yet another old idea. The Wadi Zagzau is crossed and the Wadi Mareth also. A bridgehead is established and mined against counter-attack. The Wadis are then ramped down in places, and along come the armoured forces, motorised infantry and artillery, and the second phase of the battle opens.

The enemy's arm is sacked as if it were a stormed city.

Such I hold to be "a fine example of the military art as developed under modern conditions," and I can assure my readers that there is nothing fantastic about it.

I doubt much whether a single idea in this article has not, in scheme after scheme, found its way into the War Office. All were once sniffed at, and then sent to the Central Registry to be embalmed and entombed in the cellars.

Why "Flanders stuff"? Why-indeed? Why not instead dig up the

mummies?

XV

WHY RETURN TO 1917?

TO THE STUDENTS OF TACTICS AND MILITARY ORGANISATION IT IS BECOMING more and more apparent that in armoured warfare the tail is increasingly wagging the dog. In other words, for months past a perceptible and even rapid return has been made to the tactics of 1917; tactics based on mass fire power and not on velocity—on artillery and not on tanks. Is this inevitable, or is it due to lack of imagination? My answer is—neither; for though tactical genius may be wanting—it so frequently is—I am convinced that the main reason is faulty organization.

To begin with, it is seldom realised that the most completely motorised armoured force as yet seen was our old Tank Corps of 1918. It was armed with two types of tanks—the Medium A and Mark V—and of all other arms the sole one linked to it was the aeroplane, No. 8 Squadron, R.A.F, being attached to the Corps in the summer of 1918, to be reinforced by No. 73 Squadron before the war ended. Its supply transport, though rudimentary, was far more flexible than that of any existing armoured division, because its first line consisted of supply tanks, which could follow the fighting tanks wherever they went.

Now, be it noted that when all the machines—both fighting or administrative—of a formation are armoured and can move across country at approximately the same speed, uniformity of movement is attained; but when only a part can do so, while other parts cannot, and further, should the whole be supplied by road vehicles, then a disharmony is established. First, because tanks must constantly escort the unarmoured troops, and secondly, if tank supply vehicles are unable to abandon roads, tanks, in so far as their replenishment is concerned, become roadbound.

Though in a well-roaded country, such as France, and even more so in a country like North Africa, where wheeled vehicles can generally move across country, this discord may be no more than an annoyance, in a badly-roaded country, such as Russia, it may prove ruinous. And this is exactly what I believe it has proved. Further, that soldiers, not bothering to inquire into the reasons why, have accepted the breakdown in armoured warfare as inevitable, and, finding no new alternative, have slipped back into the old and still familiar fire tactics of the last war, in spite of the fact that, in their day, they led to a general stalemate.

Before I dip deeper into this question, let us make certain of our premises. We live in a power age, and it seems to me, and I think to others also, that most of our peace-time troubles—including those which led to the present war—arose out of attempts to fit to it an economic system which was devised for an agricultural age. Correspondingly, in war, has not the fundamental mistake been the attempt to fit to a power war an organisation which was fashioned for muscle-moved armies?

To all intents and purposes, though quite unwittingly, our old Tank Corps solved the problem; for it was nearly 100 per cent a power "weapon," and was fortunate in being called upon to operate in ideal circumstances—namely, it had no competitor and its enemy had no reliable antidote. On account of

its "modernness" (harmony with its age) it played such havoc with muscle-moved infantry that to some it seemed their doom was sealed. This, however, was far from being the case, for military conservatism was such that, instead of thinking out what the antidote should be, and then how the tank could be protected against it, inquiry gyrated round bolstering up the infantry by equipping them with anti-tank weapons. Though this procedure is understandable the next step taken is not.

As anti-tank weapons menaced the tank, it logically followed that the tank had to be protected against them, as once battleships had to be against torpedoboat attack by means of steel nets and the introduction of the torpedo-boat destroyer. In the case of the tank, the means were simple and at hand. The first was to strengthen its armour, the second, to increase its weapon power; the third, to mount field guns on self-propelled carriages; and the fourth, to

support tank formations by bomber aircraft—flying artillery.

What happened? To begin with, each great army set to work to base its tank forces on the light tank, a machine which could carry neither heavy armour nor powerful weapons, and then to build up armoured divisions in accordance with existing military organisation and without regard to the demands of power warfare. With their characteristic unimaginative thoroughness, the Germans set the pace by creating a military monster—the Panzer Division.

Like a vast pantechnicon, it contained a bit of everything—tank regiments, field artillery, motorised infantry, motor-cyclists, motorised anti-tank units, A.A. artillery, engineers, aircraft, signals, and vast auxiliary services and trains. It is true that nothing in it actually moved on foot, but it is also true that, comparatively speaking, little moved off wheels. Whereas its 400 tanks could travel across country, its 4,000 vehicles could not. When strung out on a single road, the whole was about 60 miles in length!

In France the Panzer Divisions succeeded beyond expectations, not only because that country was well roaded, but because French linear tactics so fitted the blitz attack that the German tanks were able to break away from their elephantine wheeled bodies and operate freely on their own. In Russia, for diametrically opposite reasons, the Panzer Divisions, as organisations, appear

to have filed a petition in bankruptcy.

Looking back on this, it seems to me that the fundamental error is traceable to lack in understanding that a power war demands a power army, and that, therefore, the organisers should start with the organisation of such an army, instead of pouring the new tactical wine into the old organisational bottles. Had they done so, then they would not have fallen into the error of attempting to pack everything needful into the armoured divisions they devised. I will now trace in brief what I think they should have done.

First, they should have understood that military organisation is at present in a state of transition from muscle and wheel movements to cross-country and flying movements. Therefore, that the various arms and services should be grouped, not only according to their functions, but also according to their means of movement—on foot, on wheels, on tracks and by propellers.

Secondly, that these groups, when split into Corps, Divisions, etc., are not in themselves fighting formations, but instead repositories of various types of fighting and supplying power.

Thirdly, that, as each battle fought is a special operation—for no one battle

quite resembles another—before a battle is decided on, the types of fighting power it will demand should be drawn from the repositories and set together in co-ordinated fighting order. In short, the weapons needed should be assembled as they are required, and not kept permanently locked up in formations.

Fourthly, as each battle is a special engagement, so also is each main type of operation, such as—a seaborne invasion, an airborne invasion, desert warfare, mountain warfare, seige warfare and field warfare. Further, for each type a specialist general and his staff should form part of Army headquarters.

Out of these requirements the following picture emerges: The Army Command becomes the managing director of a powerful destructive business, organised in groups according to their functions and motive powers. At his disposal he has a board of expert assistants, selected for their specialist knowledge. When a major operation is decided on, by a rapid reshuffle fighting formations are built up and a specialist placed in command of them. Thus are tools and craftsmanship brought together.

Every new tactical plan is, in fact, a reshuffle, first of ideas and, secondly, of means. Therefore the means should be organised in such a flexible way that an idea can catch hold of them, so that in the least possible time the maximum power can be extracted from the minimum force required to carry out successfully the operation decided on.

In brief, in this Power Age, armies should be so organised and commanded that they can develope power scientifically, and not merely expand mass methodically.

April 6, 1943.

XVI

ARMOUR-PLATED DIVISIONS

everybody knows that there is a difference between silver and silver plate. One is genuine—silver all through—whereas, to all intents and purposes, the other is a forgery, consisting mainly of base metal. Setting aside museum specimens, which in armies are, however, rather numerous, no one in his senses would prefer the latter to the former. Yet, when we turn to military metal—iron—without the breath of a consideration the substitute is accepted for the real thing.

Thoughout history iron has been put to two main military uses—to hit with and to shield with. And should the reader wish to know more about these uses, he will find much to interest him in Mr. Tom Wintringham's latest book, Weapons and Tactics. Here, however, it is not my intention to delve into origins or to trace influences; instead it is to point out that, tactically speaking, the most formidable fighting organisation is one in which hitting, shielding and moving are combined in the highest degree.

Movement is the "Open Sesame" of the treasure cave of tactics, because the object of hitting is to get forward or prevent your enemy from getting forward, and the object of shielding is to protect or neutralise hitting power. Fire power is to armour as armour is to speed—such is the kernel of our problem.

In the last war, and until the introduction of the tank, armour was static, because it was represented by earthworks which could not be shifted—carried from place to place. Therefore the aim of fire power was to remove their garrisons or persuade them to remove themselves either by battering the trenches and then assaulting them, or by rendering them untenable. In the second case, all their garrisons did was to hop it, and then dig another line of trenches.

For its destruction, earth-armour demanded enormous fire power, so enormous that it took months to mount an attack. In their turn, earthworks could be so readily dug that both the speed of retreat and advance was negligible. Battles became like playing golf on a links composed entirely of bunkers.

Once the tank appeared this began to change, because by protecting the soldier dynamically it enabled him to fight statically; for he could now discharge his weapons from a moving platform protected by a fixed shield. Multiply this modern knight in armour several thousand times and you have an armoured division. Fail to do so and you risk getting an armour-plated one instead. This is what has happened.

In the old cavalry days the trooper loaded so many adjuncts on to his horse, that the unfortunate beast—called a charger—became a pack animal. To-day so many adjuncts are bundled into a so-called armoured division that it has become an armour-plated pantechnicon.

I go so far as to say that, because the Germans substituted the armourplated idea for the fully-armoured one, they counterfeited their armoured tactics, and in Russia have found that victory is not to be bought with debased iron. Their armoured divisions are so lumbered up with unarmoured troops that they are little more than canned oddments. Strange as it may seem, instead of cutting their armour loose from motorised infantry, artillery, etc., they have added to the latter and cut down their armour. Hence Stalingrad and suchlike Homeric contests.

In our own armoured divisions, is armour also becoming an adjunct to its adjuncts? I cannot say; therefore, I will stick to generalities.

To begin with, let us make sure of our premises. The basis of all armoured units and formations is the tank—a cross-country machine. Once this is agreed upon, the next question is its tactical organisation.

After centuries of test and trial—blind for the most part—it has been discovered that the minimum, and in all probability the most suitable, division of a fighting force is into three separate parts: a right punch, a left punch and a reserve force—much as is the case with man himself. Therefore an armoured division should consist of not less than three brigades, each of three battalions and each battalion of three companies.

Two brigades won't fit, because either one of the two punches or the reserves will be wanting, and one brigade is obviously an absurdity—as absurd as a one-armed pugilist.

Now if we take the tank establishment of a battalion at 45 machines—a reasonable number—for nine battalions we shall obtain the considerable mass of 405, which, with oddments added, will bring the grand total up to about 450. This, it would appear, was approximately the tank strength of the original Panzer Division, though it consisted, so far as I can ascertain, of only two regiments, a faulty arrangement, as I have attempted to show.

If, now, to this mass of armour are added motorised infantry, field and antiaircraft artillery, engineers, etc., in bulk, not only does the whole become unwieldy, but its cross-country movement is reduced to semi-immobility. The reason for this is that, as all these adjuncts are carried in or hauled by wheeled vehicles, they are in consequence tied to the roads, and because of this the mobility of the tank brigades is severely circumscribed; for having to operate with these wheeled troops, in turn they become road-bound.

What, then, is the solution? There are two. The first, which at present is not fully practicable, is to move all the adjuncts on or by tracked vehicles. Yet, even then, the mass would remain ponderous in the extreme. The second is to slim the existing organisation, not necessarily by scrapping units or even by reducing them in size, but instead by rearranging them.

This becomes feasible directly we think in terms of armoured corps instead of armoured divisions, the corps being the administrative formation and its divisions its main fighting instruments. For example, let us suppose that such a corps consists of three armoured divisions; then, by relegating the bulk of the divisional adjuncts to the corps, the divisions themselves will become true armoured and road-free forces.

As an example and nothing more, for the actual detail would need much thinking out, my suggestion is that they might be organised as follows:

(1) Headquarters and signals; (2) reconnaissance unit; (3) one squadron R.A.F.; (4) three brigades of tanks of three battalions each, two battalions to be armed with tanks and one with self-propelled field guns; (5) a light A.A. regiment; (6) an anti-tank regiment; (7) a small bridging train; (8) a group of light aid detachments; (9) a first line cross-country supply column, and (10) a minimum of other services. Every unit should be able to move across country.

Such a simplified organisation permits of the division operating as a completely armoured force, or when necessary in co-operation with wheeled forces—infantry, field artillery, etc. When co-operation is required, all that need be done is to detach from the corps and attach to the division such arms and services the operation in question demands. Thus, assuming that a divisional commander wants a motorised infantry brigade, it and the services it will require will be loaned to him by the corps, and at once fitted by him into his divisional organisation.

I cannot help feeling that, unless some such simplification is effected, one of two things is bound to follow.

Either armoured divisions will largely become inoperative on account of their bulk, as I think they have in Russia, or else their armoured units will be so whittled away that they will develop into thinly armour-plated infantry divisions, as also I believe has happened in Russia.

Then, instead of the iron dog wagging its muscular tail—a pleasant sight—we shall see the muscular tail wagging the dog—an idiotic sight.

XVII

MACARTHUR

WHEN A LITTLE OVER A YEAR AGO GENERAL DOUGLAS MACARTHUR LANDED IN Australia to assume supreme command, many believed that the invasion of that continent was imminent, and some even suggested a retirement to the so-called Brisbane Line. To all it was evident that Australia was ill-prepared to face an invasion, so evident was this that few paused to look at the problem through the enemy's eyes.

At the time it appeared to me that two things contradicted this assumption—namely:

(I) That Japan had not the resources to carry on her war in China; watch her Manchurian frontier; complete and consolidate her conquests of the British and Dutch Malayan and East Indian Empires; fight the Americans at sea, and on the top of all this invade a continent three-quarters the size of Europe.

(2) That, as an Asiatic power, it would be disadvantageous for her to attempt to conquer and then absorb a purely white man's land. First, because assimilation would be all but impossible, and, secondly, because in a long-drawnout war, a time might come when the white men would be willing to discount the losses of their Asiatic territories and agree to negotiate peace; whereas, were Japan to occupy any of their homelands, they would fight to the bitter end.

That at this time the Japanese might have seized certain points on the North Australian shore line is highly probable; yet, it seems to me, only for protective purposes—namely to deny to us and the Americans bases from which we could set out to attack their East Indian conquests.

Unlike her ally Germany, a long war is by no means disadvantageous to Japan. Clearly, I think she sees that, should the war drag on for years to end in the West with a collapse of Germany, her enemy's peoples may by then be too weary to continue the struggle in the East. The strategy which fits this best is a defensive one, based on consolidation and delay, coupled with offensive tactics, the aim of which is constantly to push the attacker back.

Should this be so, then, in my opinion, to divide the war into two compartments—a Western and an Eastern—and deal with each separately, is a very dangerous proposal, because:

(1) Human endurance is always limited.

(2) Should Germany be defeated, peace will become the dominant problem in the West, and the continuance of the war in the East the secondary problem, and

(3) Unless by then Japan is seriously crippled, endurance may peter out.

Though these possibilities are unpleasant, they should not be relegated to the boxrooms of our minds as defeatist. They are nothing of the sort; for, whether we like it or not, one day they may creep out, and should they start on their wanderings at the end of the war in the West, or when it is in its last lap, they may quite easily disrupt any general peace settlement. This is a world war, therefore, it must be looked upon from a world point of view and not from inter-continental ones.

In this war General MacArthur's position is clearly a prominent one, and taking all in all—his difficulties and the comparative paucity of his resources—his first round has been a remarkably successful one, for it has halted the Japanese advance.

This has been done, so at least it seems, because he has relied more on men than on machines, and has used machines in surprising ways. Judging his men rightly, he has used them as men should be used—as intelligent and resourceful creatures. It was the wits and the guts of the Australian and American soldiers, more so than their equipment, which carried them across the tail of Papua. And it was man-power, in the form of labour, which, by constructing a vast system of airfields, assisted fighting man-power to advance.

Further, MacArthur has made surprising use of the machinery of war, as the whole campaign from the victory of the Coral Seas onwards has proved. On land the aeroplane has consistently been used as a weapon of surprise, and more particularly so in the form of the troop-carrier.

In commenting on the lessons of the Papuan campaign, General MacArthur has said that "the way to victory lay through new and broadened strategic and tactical conceptions; that air power, combined with land power and supported by sea power, permitted the application of 'swift massive strokes', and such new methods would eliminate the necessity for costly island-to-island advances."

This introduces a question of first importance, which is: what is to be the character of the grand tactics on which Anglo-American operations are to be based? Let us examine this question, for on its answer will depend the future of the war in the Far East.

First, whereas in the West Germany can be encircled, in the East Japan cannot be, unless Russia marches against her. As this is problematical, it is safer to assume that Russia and Japan will remain at peace.

Secondly, Japan and the countries she has occupied can be attacked from three directions: eastwards from India, southwards from the Alcutian Islands and northwards from Australia. These three localities are the bases of all Anglo-American operations in the Far East.

Thirdly, in between them lies China, which, so long as she remains in the war, not only contains considerable Japanese forces, but also forms a potential hub to the lines of operation leading forward of the above bases. Could one of these lines contact this hub, then Japan's situation would at once become precarious.

If I am right in this, the first Anglo-American problem is clear: It is to keep China in the field, and as China is all but unget-at-able except by air, the first step towards the defeat of Japan is the air supply of China.

Granted that China can be kept in the field, then the next step is to operate against Japan simultaneously from the three bases and against as many points as possible, in order (1) to compel her to disperse her forces; (2) to strain her communications; (3) to squander her supplies, and (4) to bewilder her military brain.

Grand tactics therefore demand a distribution of a considerable number of self-sufficient and comparatively small forces operating independently, yet towards a common centre, and not the launching forth of a concentrated Armada. They should resemble those of Genghis Khan rather than of Philip II.

A force seizes this island, another that island; a force operates against this

locality, another against that locality—all with bewildering rapidity. Those which succeed, consolidate their gains and press on; those which do not, rapidly return to their bases and strike again. Obviously such rapier-like thrusts in so vast a theatre of war can only be carried out by airborne forces; at times co-operating with sea-borne, at times on their own.

These grand tactics are those of flying regiments supported by flying artillery and flying supply trains, and not of air bombardments awaiting the arrival of slow-moving land forces to take advantage of their devastating work. They are the tactics of the power age and not those of the age of brawn and muscle, to which air bombardments, as singular operations, still belong; for all they do is to substitute vertical for horizontal fire.

These tactics reduce time to a fraction, and for the destruction of material things they substitute the paralysation of mental things; they emasculate the brain of the enemy's command more so than attack the body it controls.

The success of these tactics is assured, once we and the Americans wake up to the fact that industrially we outclass Japan by probably ten to one—possibly more. Yet, like our endurance, our industrial power is not inexhaustible; therefore it should be fitted to these tactics above all other tactics.

In the Far East distances are so vast that I can see no alternative solution to that of conquering space by velocity, instead of by ponderous concentrations. This, so it seems to me, MacArthur's first round has made clear. He has blazed a trail for the second round—the trail of power tactics. Of men riding machines and not merely of machines fashioned into flying gun mountings.

The new cavalry age is dawning; for though as yet we see things dimly, in the air we hear the thud of approaching hoofs.

April 20, 1943

XVIII

IMPROPERGANDA

PROPAGANDA IS THE WEAPON OF THE PSYCHOLOGICAL ATTACK, AND ACCORDING to Lord Ponsonby, "it is as much a weapon as a gun and far more effective." Unfortunately he does not mention which model he had in mind—whether Mons Meg or an 88 mm.

In the early days of artillery there were many strange cannon, such as lombards, bombards, culverins, periers, sakers, minions and falconets. Each discharge was followed by a suffocating stench; all kinds of oddments were projected from them. For instance, Thackeray's Major Gahagan fired two Dutch cheeses and "a bottle of olives in each swivel."

Likewise, our propaganda is still very primitive, notwithstanding that its means of propulsion are up-to-date in the extreme. It continues to gyrate round scalp-hunts, war dances, Witches' Sabbaths and infernal invocations. To appreciate this, all the reader need do is to refer to Parkman, the historian, and any authoritative work on sorcery.

Before the Red Indians trod the war-path they retired to some gloomy

forest glade and set up a post which represented their enemy. Then they leaped round it, yelling imprecations, hurling insults at it, extolling their own valour and hacking it with their tomahawks.

What did the medieval sorcerer do? He invoked the Prince of Lies, conjured forth frantic apparitions from that most ancien tof all tombs, the primitive instincts (hate, fear, greed, terror, vengcance) of his dupes; horrible, unclean things which seemed so real that they could be buffeted by words, and into whose ectoplasm emotional needles could be thrust.

Do these comparisons miss the mark? I think not!

Disraeli once said, "We rule people by words," and Georg Brandès that "War means the assassination of truth." Someone else has said, "It is easier to murder truth than kill a lie," and G. S. Viereck, in his Spreading Germs of Hate, has remarked that "the object of the propagandist in war time is to make men see red," and "Without hate there can be no propaganda. Give me something to hate and I guarantee to organise a powerful propaganda campaign anywhere within 24 hours."

Though this is pure Satanism and very real, it is, nevertheless, very unscientific. Whereas in a scalp-hunting community these things have a survival value, because war is perpetual, in a scientific one they are death values; for, in such communities, the sole possible justification for war is its use as a surgical instrument and not as scalping knife.

Therefore propaganda should be such that, whilst it psychologically assists the physical weapons in their surgical work, it simultaneously paves a way for the physical struggle to attain a moral end—that is, a more healthy peace than the one broken.

In this psychological contest the aim is the moral disruption of the enemy by inducing them to lose faith in their cause. This cannot be done by threatening them with annihilation, but only by offering to them something more acceptable than what they have or are likely to gain even should they win. In any case, as Rabelais once said: "Never drive your enemy to despair," because a desperate people will sell their lives as dearly as will a desperate man.

Yet this is exactly what we are doing. True, it matters little what private persons suggest: for instance, that Mr. H. G. Wells has a plan to punish the war-guilty. But it matters much what a man in Lord Vansittart's position says, because for long he was assisting in directing our foreign policy. Therefore, it seems to me that Viscount Cecil is right when he recently said in the House of Lords: "One man who would be thoroughly pleased with everything Lord Vansittart had said was Goebbels."

Should this be so, then what are we to think when a Minister of the Crown proclaims: "All Nazi leaders and all the people responsible for these brutal outrages on the Continent of Europe will all be put on trial. They will get justice, but justice and severity are not incompatible, as they will discover"?

It is not the contents of such utterances that I question, instead it is the wisdom of broadcasting them to the enemy. For if anonymously you condemn tens of thousands of people to the gallows, you make it an absolute certainty that the nation to which they belong will fight to its last bullet. In turn, this may cost a million or more avoidable casualties.

When are we going to be a little more scientific in our propaganda by keeping our Unconditional Surrenders well up our sleeves? When are we going to

cultivate a little more humour and realise how comic our propaganda must seem to others when, having formed a committee to consider how to re-educate 80,000,000 Germans, we publish such a book as Our Towns: A Close-up?

Is not all this rather amateurish and ridiculous in a power war, when every source of power should be used scientifically towards establishing a more generally acceptable peace than the one broken? In the First World War a great American certainly thought so. His name was Woodrow Wilson—the greatest propagandist of that conflict.

Standing outside the rout of scalp-hunters and sorcerers, he offered a New Order to a demented world, as appealing to the one side as to the other. Whether it was realisable I do not know, but what eventually killed it I do! It was that the "Vansittartism" of the physical struggle of 1914-18 was carried over into the moral struggle—the peace-making of 1919.

It is as well to remember this, and should any of my readers be too young to do so, or should age have dimmed their memories, they cannot do better than read, or re-read, Mr. Harold Nicholson's "Peacemaking, 1919." What they will find in it is this: Though, like a drug, the scalp dances and infernal invocations may, by stimulating human passions, have helped to win the physical struggle, the Frankenstein monster they created morally strangled the would-be peacemakers.

Finally, the whole question boils down to this: What is our war aim? Should it be the extermination of our enemy—literally so, as Redskins were wont to exterminate a colonial settlement—then Propaganda should be as black as "Vansittartism" can paint it. Should, however, it be to establish a more contented world than the one out of which the war emerged, then it should be white and of the Wilsonian type.

White propaganda—and I will repeat it—should be considered only as a weapon of war in so far that it enables the physical struggle to attain a moral end. Therefore, it should be profoundly sane, as Wilson's was, because the physical struggle, arousing as it does the passions and emotions, is apt to become profoundly insane.

As its object is to establish a new and more universally acceptable order, its protagonists must discover and understand what was evil and good in the old order, and then exorcise the one and propitiate the other. In short, they must disentangle the causes of war from the essentials of peacefulness.

Having done so, they must offer their new order to friend and foe alike as their peace aim. Being positive it will attract, and by so doing it will divide the enemy peoples into two antagonistic groups—those who are magnetised by it and those who are not. Thus are psychological battles conducted.

Next, as an assurance of honesty of intention, this aim must, in part at least, be established by the nations making it in their respective countries as the war proceeds. Thus are psychological victories founded.

To-day the peoples of the world yearn for a better peace, yet they cannot define what they want: for, though the need of such a peace is sensed, its fullness is as yet inexpressible.

Wilson tried to express it and was strangled by the sorcery of the black magicians. Should yet another Wilson arise, he will meet with an identical fate, if these same witch doctors continue to conjure forth the fury of the nations by their infernal propaganda, which, like oil thrown on to the flames of the war, will continue to burn long after the last shot is fired.

Peace then will be consumed by fury, and, as sure as night follows day, phoenix-like out of its ashes will be hatched yet another world war. Is man, then, eternally unteachable?

April 30, 1943

XIX

GRENADIERS ON CASTORS

THROUGHOUT HISTORY THE SOLDIER HAS LACKED BUT ONE THING—HE HAS steadfastly refused to think. And, as a rider, may I add, he has as steadfastly opposed whoever has troubled to think for him. For instance, in the fourteenth and fifteenth centuries the chivalry of France went on charging English archers, and in spite of the fact that each time they did so they were tumbled out of their saddles.

. That is a long time ago, I agree. Nevertheless, step up into modern times and the "Do-and-Die" theory, in contra-distinction to the "Think-and-Do" is as clearly apparent.

In 1848 two companies of the Cape Mounted Rifles were the decisive factor in Sir Harry Smith's little victory over the mounted Transvaal Boers at Boomplaats.

In 1881, after our fiasco at Majuba, Sir George Colley wrote: "The want of good mounted troops told very heavily against us."

Nevertheless, in 1899, when Sir William Butler, our Commander-in-Chief in South Africa, warned the Government at home of the need for mounted troops, he forthwith was recalled.

Then came war, and to cap this incident, when the Australian Government offered to provide a contingent of troops, the War Office reply was: "Unmounted men preferred." Nevertheless, as the German Official History of the Anglo-Boer War comments: "It is a remarkable fact that the British, dreaming only of the hand-to-hand fight, never succeeded in achieving it." Not at all, for it would have been far more remarkable had they done so.

A truly classical case of do-and-die soldiership occurred in 1900. That year a new manual was issued. By chance it fell into the hands of Mr. H. G. Wells. He read it, pondered, and then wrote:

"There has recently come into my hands a little pink book rather badly printed, and priced at twopence, which begins and ends with the above inscription. It is clearly, from its prominence, (it is given two full pages to itself), an important inscription, though I do not know what it means. In addition, this little pink book bears upon its cover, and again upon its

title page, the remark $\frac{61030}{2883}$ and $\frac{1}{2899}$ and having in that manner

propitiated gods unknown to common men, comes to business, and frankly admits itself an exposition of 'Cyclist Drill' as evolved by the War Office after the quickening experiences of the year 1900."

In its introduction is discussed with some care: "Are cyclists infantry or cavalry?" A question which comes perfectly natural to them: "Is a cyclist, in fact, a grenadier on castors or a hobby-horse?" And the decision: "Cyclists are infantry,' says Wt. 13,016, etc., and are to be treated as such." Therefore, "Our authorities have proceeded to adopt our quite obsolete infantry drill, a drill developed originally out of the moral needs of pedestrian pikemen fighting in close order, as cheaply and obviously as possible to the new feature. That a cyclist is, after all, a cyclist, has clearly never entered their brains." The "cyclist soldier and his outfit is entirely dominated by the infantry tradition"—his greatcoat and rifle are strapped between his legs. "The sword will be attached to the cycle. It will be a gymkhana job, of course, to draw it; it will lead to disgraceful croppers in the face of the enemy; it will be of no possible service when drawn except for crude heliographic purposes—chiefly for the benefit of the enemy; but then officers always have had swords."

Thus far Mr. Wells on the first manual on mechanisation ever issued to our Army. I have read it myself. It consists of 32 pages divided into five parts as follows:

Part I (15 pp.)—On dressing and saluting, etc.

Part II (7 pp.)—On company drill.

Part III (2 pp.)—On battalion drill.

Part IV (3 pp.)—On ceremonial.

Part V (5 pp.)—On route marching.

Altogether it is a priceless gem of the Do-and-Die School. The soldier of 1914 would no doubt have laughed at all this, yet his merriment would have been misplaced, therefore we will continue.

In 1916, when Colonel Swinton and other think-and-doers brought the tank into being, what did the War Office do with this radically new machine?

Instead of forming it into a unit of its own, they tacked it on to the Machine Gun Corps and dubbed it the "Heavy Section."

Next, when this bullet-proof weapon was sent out to France, it was ordered by G.H.Q. not to lead but to follow the "soft-skinned" infantry into battle.

Well might it be asked, what would Julius Cæsar have said had the Roman Senate instructed him to order his legionaries, when advancing to the attack, to hold their javelin-proof shields well over their rumps?

The soldier of 1943 will laugh, as did his predecessor; "All this is changed," he will say, "now we are armour-minded."

True, in a way, for such mind as he brings into action is so thoroughly armour-plated against new ideas that, even war itself, with death at every corner, cannot penetrate his mental carapace.

Here is an instance. A few days back Reuter reported a Cairo artillery officer as having declared:

"The superiority of the gun over the tank has come to stay. The tank

is now almost in the position of the cavalry at the end of the last war. It is no longer a weapon of assault. It has become a weapon of support."

Could this officer but think—which in Cairo may be a little difficult—he would have understood that if tanks are required to assault, to begin with they should be organised as assault formations.

When cavalry could assault, would any sane general have suggested that horse and foot should be mixed up together? Of course not, because the speed of a horse varies from that of a man.

Could cavalry charge with riflemen hanging on to their horses' tails? Unbelievable though it is, such an experiment was several times attempted, and the results were always the same. The horse—a tactically-minded creature—thinking itself attacked in rear, lashed out, when its rider went over its head and its strap-hanger to Kingdom Come.

Yet, to-day, tanks are mixed up with infantry. In fact, our so-called armoured divisions are no more than buns of infantry dough sprinkled with a pinch of steel currants.

The tank is no longer an assault weapon, because, since the beginning of the present war, we have never organised it as such. It is most misleading to say, "it has become a weapon of support"; for, on account of its organisation, it has never been anything else.

In 1917-18 it was at times an assault weapon, but to-day it is no longer so, not because of the gun—deadly anti-tank weapon though it is—but because of the do-and-die tactics which still obsess the bulk of our soldiers.

Should our Cairo bombardier, cannoneer, culverineer, or whatever he is, be right, that "the tank is now almost in the position of the calvalry at the end of the last war"—what was that position? Shakespeare answers:

Big Mars seems bankrupt in their beggar'd host,

And faintly through a rusty beaver peeps;

The horsemen sit like fixed candlesticks

With torch-staves in their hands

This, in spite of all the cannon balls vocally fired in Cairo, I do not believe. My disbelief, however, must await another article. Here I wish to make but one point—it is this:

Do and Die are still with us. In 1900 they decided that cyclists were infantry; in 1916 they decided that tanks were machine-guns, and 1943 they have decided that they now are close support weapons.

It has no more occurred to these gents that a tank is a tank than it did to their predecessors that a cyclist was a cyclist and not a grenadier on castors. One and all belong to the General D'Ordel school.

Long ago that noted warrior told us that there are three kinds of battles: (1) When you assault the enemy; (2) when he assaults you, and (3) when neither of you assaults the other.

Obviously then, according to Mons Meg of Cairo, we are in for a long war. But hush! Here comes the Cuirassier on Wheels.

XX

AN ARMY OF LIONS

more than 100 Years AGO BARON JOMINI, A SWISS SOLDIER WHO HAD SERVED under Napoleon, wrote that war was "a terrible and impassioned drama," and so it has remained, though to-day the greater part is played on an invisible stage.

In his age generals were dramatised by events; they stood in the centre of things; all moved about them; they could be seen by their troops, by the enemy and, what was more important still, by the historians. They were characters; to-day they have become anonymities; for though their names are known and their promotions and demissions are recorded, what their general-ship consists in is to all but a few a blank.

This great omission was vividly brought home to me on reading Alan Moorehead's fascinating A Year of Battle. Though he seems to doubt the value of generals altogether, in his last chapter—which, incidentally, might well be published as an official pamphlet and issued to all generals—he either consciously or unconsciously refutes that claim.

What it seems to me he really propounds is this: That it is not the generals who have lost their value, instead it is old-fashioned generalship.

To begin with, Moorehead informs us that "because we still cherish the innocent belief that battles are lost or won by generals, Auchinleck was removed from his post" and succeeded by Alexander. Fortunately, perhaps, for this article, I know neither, and therefore can be impartial.

Auchinleck, so far as I am aware, I have never met, and Alexander but once or twice. All I recollect of him is a very dynamic man, a professional soldier in the best sense of that word, and what struck me most, a man of culture—that is, a soldier who takes interest in things general and not solely in soldiering.

Unfortunately for this article, Moorehead's book ends with the arrival of Alexander, for had he remained on in Egypt, and, therefore, been in a position to strike a comparison between the two generals, his book would be even more valuable than it is.

However, I agree with him that it was not Auchinleck who failed, because the machine he commanded was antipathetic to control. Outwardly it was a modern army, yet highly imperfect; inwardly, it was an ancient army, and in this respect far too perfect.

For long our tanks were out-gunned, and though our bombers were superior to the enemy's, for long our fighters were inferior. Besides, we used no divebombers, few paratroops, and little or no troop-carrying aircraft. Technically, in almost everything, we were sadly in arrears.

In command, we were inferior also. First, as Moorehead points out, it was the War Cabinet in London who decided when and where a campaign was to be fought.

Then, "once an offensive had been decided on, the problem of how it should be fought rested not upon one man but fifty or more."

And again, "The tactics were those which were recommended by a staff of experts... in short, the whole system was explained in eight words by a

British general to the war correspondents after the fall of Tobruk. He said: 'We are still amateurs. The Germans are professionals.'"

Therefore, I will now turn to what Moorehead has to say of them.

"In all its branches the German war machine appeared to have a better and tighter control than our army" "Time and again one would note the steady rhythm of a German attack." "It was in the control of tanks that the Germans revealed their greatest gifts. They were tank technicians pure and simple. They were the élite of the Afrika Korps, as compact, as neat and efficient as a team of acrobats. They had been trained to the nth degree and as a group, a group that could be controlled very nearly as easily as one tank." "Rommel was an abler general than any on the British side, and for this reason—because the German army was an abler army than the British Army." "Soldier and general were interdependent. The army and the general were one."

Their moral was high, they all knew what they were fighting for, whereas "among the British . . . there was . . . a general and growing feeling that something is being held back from them, that they are being asked to fight for

a cause which the leaders don't find vital enough to state clearly."

Though I cannot swallow in toto the postulate that the abler army makes the abler general, because I am one of those old-fashioned soldiers who still believe in Napoleon's borrowed maxim that "an army of lions led by a stag will never be an army of lions," to-day there is far more truth in Moorehead's postulate than there was a generation ago.

The reason is that modern armies are far more mechanised—that is, in-

dustrialised—consequently technique is all-important.

This was forcefully brought home to me the other day when reading the following paragraphs in Peter F. Drucker's new book *The Future of Industrial Man*. I will quote them in full, for either they are sheer nonsense or else

vitally important.

"To-day the industrial machines of war are autonomous and the centre around which everything else is built. The infantry man has largely become a subsidiary source of power. The social power-relationship between a pilot and the crew of a bomber airplane, or between the commander of a tank and his men is the same as that between a foreman and the gang on the assembly line. It is based as much upon a hierarchy of skills and functions as upon a hierarchy of command.

"The social difficulties in every army to-day, the inability to maintain the old forms of discipline, the old system of promotion and the old ranking according to seniority instead of industrial skill, are expressions of the fact that the old pre-industrial society of the army is inadequate to organise

and to master the new industrial social reality.

"In every army to-day the old social forms give way to new ones a change which has been most drastic in the Nazi army, and to which that army owes much of its fighting strength and moral."

Should this be so, and I for one accept it, not only must we build up a new army, but concurrently we must develop a new form of generalship without sacrificing the virtues of the old form.

In Egypt, after much trial and error, we built up such a machine, and in General Alexander we found a man who could control it. A man of sufficiently

broad views and general knowledge to be both general and works manager to his foremen-officers and their gangs.

Though at El Alamein odds were in his favour, once that battle was fought and won, he and his staff—particularly his Q. staff—carried the Eighth Army, under General Montgomery, 2000 miles westwards from that place. Then, rapidly changing over from desert to mountain warfare, he linked up the Eighth Army with the other armies under General Eisenhower, and as his executive second-in-command controlled and directed them as one combined force. Thus he gained total victory in six months from start to finish.

This is an achievement indeed, an achievement in generalship and technique. It is more than that, for, coupled with the campaigns which preceded this this victorious climax, we have unrolled before us a detailed scheme, an evolutionary plan of how not and how to wage a machine war; of difficulties which withered good generals, and of good generals who withered difficulties.

Therefore, I think that Alan Moorehead is very nearly right when he says

of the German army—the first of the great industrialised war machines:

"It was simply a great pyramid in which every stone had to fit into place, and at its apex the rightly shaped stone was set in position. This topmost stone was the one most people looked at because it stood alone at the top and first arrested the eye. But it was no more important that any other stone. Without those stones at the base the whole pyramid could not have existed. Each stone, whether it was at the base or in the middle or at the top, had to perform its function, and no function was more important than another. It was the solid collective mass that counted."

In brief, an army of lions led by a lion is an army of lions. If Wavell, Auchinleck and Alexander have taught us the truth of this maxim, then they have taught us much.

May 10, 1943

XXI

CUIRASSIERS ON WHEELS

WHY DO SO FEW SOLDIERS THINK? BECAUSE SO MANY HAVE NEVER BEEN TAUGHT to do so. In this respect the soldier is on a level with the civilian; for though our schools teach us "what to think", "how to think" seldom forms part of their curriculum. The result: most of us are little more than gramophone records. Thus it comes about that, when a new weapon is invented, soldiers at once try to make it dance to some old tune.

For example, what is a cyclist? Is he infantry, cavalry or artillery? Obviously not the last; for, in spite of his wheels, he has no limber. Therefore he must be either a foot-soldier or a horse-soldier; but which? As he does not carry a lance he must be a rifleman. The upshot is that he is taught to dance to infantry tunes.

Again, what is a tank? It can't be an infantry weapon, because its men do not carry rifles. It can't be fitted into cavalry, for where are the nose-bags? Therefore it must belong to either the Machine Gun Corps or the Field Artillery;

and, as it is armed with machine-guns and cannon it must belong to both. Therefore, as both machine-guns and cannon are support weapons, it is a

support weapon. Otherwise put-an infantry crutch.

There is still, however, a third possibility. Suppose no counterpart for a new weapon is to be discovered in the Tower of London, or that it neither marches, pedals, trots nor gallops. Suppose it is a balloon, an aeroplane, lethal gas or a grenade, something which quite obviously is not a lance, a rifle or a cannon. Is the soldier nonplussed? Not at all; for, without a moment's hesitation, he relegates it to the Royal Engineers.

This process of unthoughtful classification has cost us thousands of millions in money, and hundreds of thousands of lives, and will continue to do so, so long as we think of each new or improved weapon as a prop or support of an

antiquated one.

What, then, should we do? We should go to the nearest boxing ring and open our mental eyes. There we shall see that each pugilist has two fists. They are not called "assault" and "support", but "right" and "left". Sometimes the boxer knocks out his opponent with a right punch, sometimes with a left punch. Though he uses his fists as occasion demands, it may be said that one of them always protects the other. In short, the boxer's tactics are those of attack and defence.

For fists let us substitute sword and shield. Then the tactical picture becomes clearer still. The shield, by protecting the swordsman, against his opponent's sword, enables him to use his own sword with full effect. Play between sword and shield is the essence of all tactics, and obviously a soldier equipped with only a sword or only a shield is no match for a soldier equipped with both, any more than a one-armed pugilist is a match for a two-armed.

For soldiers let us now substitute armies; then, when they are organised tactically, sword and shield are represented by two different bodies of troops; the one to guard, the other to hit; the one to hold, the other to manœuvre. In short, the one provides a base of action for the other. These two bodies of men were for thousands of years called infantry and cavalry.

At length inventive genius discovers gunpowder, whereupon the cannon is introduced as an additional protective weapon, to be added to infantry and cavalry and to become the protective base of each. Soon the gun grows in power; rifles are introduced; then magazine rifles and machine-guns, when the combination of artillery and infantry becomes so powerful that the combination of artillery and cavalry loses all tactical value.

What does this mean? That battles are waged between the protective bases of either side. Therefore there is little or no mobility; there is little or no manœuvring; the shield dominates; the sword is sheathed; battles are between shield-pushers—the one-armed pugilists; the year is 1917.

The problem now becomes one of how to unsheathe the sword, and it is solved by the introduction of the tank.

Because that weapon is invulnerable to bullets, it can maintain its mobility under infantry fire, and, therefore, it can manœuvre and hit. But because it is not proof against shell fire, it is a bad holder of positions, and unlike infantry it cannot go to earth. Nevertheless, as it is bullet-proof, infantry can neither attack it nor defend themselves against it; for its armour has disarmed them, and so long as they remain disarmed they are unshielded; therefore, in order

to defeat them, all the tank need do is to assault them, as it successfully did in the last war at Cambrai and Amiens.

What next happens? As infantry are impotent, the cannon has to move forward, and it does so in the form of the anti-tank gun. The Do and Diehards proclaim the object of this movement to be to "support the infantry."

It is nothing of the sort; instead it is to knock out the tanks, and as these anti-tank guns, unlike tanks, are vulnerable to infantry fire, infantry do in fact "support" them by acting as their escort, for in that capacity they protect

them against hostile infantry attack.

What now takes place? Tank assaults become more and more difficult and costly, so much so that Mons Meg of Cairo has recently informed Reuter that: "Tanks mines and anti-tank guns have an enormous advantage over the tank which the tank could only regain by the use of such an enormous weight of metal as to make it impracticable and impossible to move over ordinary road bridges."

Why "only"? Is iron the sole element in the tactical world? Is not thought an even more important one? If the tank mine and the anti-tank gun do possess an enormous advantage, why not, instead of tackling the protective problems from the tank end, tackle it from the tank mine and anti-tank gun extremity? Why not think out means of neutralising these weapons other than such as will lead to tank suicide?

Here at length enters the Cuirassier on Wheels, and this is what he says: "Why do you transform me into a Grenadier on Castors by encumbering me with infantry, who cannot protect me and whom I have to protect? Instead, why not provide me with the following tactical tools:

"Minesweepers, to clear a way through the enemy minefields; self-propelled artillery, to cover my advance by horizontal fire; dive-bombers, to do the same by vertical fire, and smoke-producing machines, to blind the enemy anti-tank

gunners.

"Further, I should like to be provided with additional attachable and detachable armour, so that I can don it when called upon to assault, and divest myself of it when the assault is over. After all, did not my ancestors, the illiterate knights of the Middle Ages, do this?

"Further, I ask that various devices be introduced to maintain and sustain my mobility. Such as bridging machines, scaling machines and, above all, cross-country supply machines. All these many things, when set together in a well-balanced organisation, will provide me with that protective shield I need in order to use my sword—my fighting tanks—with maximum effect."

Novelty demands novelty and not antiquity to fecundate it, and novelty itself is the offspring of thought; for anything new, however unimportant, is

child of a new idea.

Thus far during the war we have concentrated our thoughts almost entirely on turning out more and more powerful fighting machines—the battleships of our land fleet—and have largely overlooked the fact that, like the battleship, the fighting tank, in order to develop its full power, demands many auxiliary "vessels."

As in the Crimean War our new steamships of that period were employed in towing in and out of action the wooden three-deckers which bombarded Sebast-opol, to-day the prevailing idea is to use tanks to haul infantry in and out of battle.

Superb machines though we now have, they have never as yet been organised into battle fleets, for such organisation as exists is nothing other than that of a destroyer flotilla escorting a convoy of merchantmen.

Grenadiers on castors they are and grenadiers on castors they will remain, so long as we are obsessed by the antiquated idea that to support the old is more profitable than to exploit the new.

May 24, 1943

XXII

FIVE LESSONS FOR THE GERMANS

AS THE SUMMER CAMPAIGN IN RUSSIA APPROACHES, IT IS AN OPPORTUNE MOMENT to ask ourselves this question: How came it that, though the two previous German summer offensives were limited successes, their two winter defensives were grim failures?

The answer, I hold, is to be sought in the German theory of war. It is based on the unlimited offensive, a continuous attack carried out with such force and speed that the enemy is whirled into so complete a state of confusion that he has no choice between disintegration and capitulation.

This unlimited offensive resembles a cavalry charge, and like it it demands like conditions. First, the going must be good—that is, the theatre of war must either be well-roaded or easily traversable. And, secondly, the vital area of operations—that part of the enemy's country essential to the maintenance of his forces—must be sufficiently shallow to permit of the initial momentum being maintained right across it—as in a charge.

Bearing in mind that motorized forces have at least three times the radius of action of muscular, these conditions favoured the Germans in both Poland and France. The one was a flat open country, and, when dry, crossable in all directions; and the other was exceptionally well-roaded. In both the depth of the vital area of operations was comparatively shallow, about 300 miles to the river Bug, and a little less to the river Loire. Further, they included both capitals—Warsaw and Paris—and also two important industrial areas—those around Lodz and around Lille.

In Russia, these conditions did not hold good. The country was badly roaded, and though, like Poland, generally crossable when dry, as a storm of rain is apt to render it impassable for wheeled vehicles, an invader, dependent upon such, must follow the roads. The vital area of operations is exceedingly deep, stretching as it did in 1941, from the river Bug to the Volga, a distance of 1200 miles. Lastly, Moscow is 700 miles from East Prussia, and the industrial area of the Donetz is over 500 from Poland.

In spite of these adverse conditions, and in spite of the Russian armics being powerfully motorized and armoured, in the space of five months the German 1941 unlimited offensive swept forward six to eight hundred miles. Though it did not submerge Leningrad and Moscow, it overran seven-eighths of the Ukraine. Nevertheless, it failed in its object—the disintegration or capitulation of the Russian armies—because the momentum of the assault petered out before the vital area could be more than two-thirds overrun.

For purposes of illustration, I will now tip the whole of this campaign into France. Then it will be seen that the situation which faced the Germans towards the end of 1941 bears a close resemblance to the one which faced them in 1914. In 1914 their momentum petered out on the Marne—roughly, two-thirds of the way to the Loire. Like Moscow, Paris did not fall, and, like the Lille area, the Donetz Basin was occupied.

But there was this difference: whereas, in 1914, the bullet-power of armies was in itself sufficient to establish an all but unlimited defensive on frontages proportional to strengths; in 1941 armoured troops could always pierce an infantry front, and the frontage the Germans were forced to halt on was roughly three times the length of their front in 1914. Further, the force of infantry at their disposal was no greater than then, nor was it sufficiently well armed and organized to beat back determined tank attacks.

Therefore, it would appear that, in concentrating on the unlimited offensive, the Germans paid too little attention to the problem of the defensive under armoured warfare conditions. Their armies consisted of two distinct bodies of troops—a small, highly offensive armoured force, and an immense, weakly defensive infantry force.

In France, some ten German armoured divisions—150,000 men—won the five weeks' campaign before the bulk of the German infantry came into action.

In Russia, probably not more than twice that number of armoured divisions hauled, in five months, the bulk of the German infantry eastwards from 600 to 800 miles, and, as winter set in, deposited them on the line Lake Ladoga—Rostov. As this frontage was over 1200 miles in length, even had this infantry been strongly armed to meet armoured attack, they would have been incapable of holding so extended a line, and for three reasons.

The first was, they were, numerically, not strong enough to do so. The second that, on account of the frozen ground, field works were most difficult to dig and construct. And the third that, so long as the snow was not too deep, Russian tanks and infantry could manœuvre freely across the frozen country and its rivers, and be followed by their supply columns.

The upshot was that, once the Germans' armoured momentum exhausted itself, the Russians launched a series of limited offensives. These, in spite of considerable loss of ground, the Germans in part neutralised by establishing a chain of "hedgehogs"—all-round defended localities—around which the Russian attacks swept until halted by deep snow.

In the summer of 1942, still, apparently, blind to the importance of the defensive half of the problem, the Germans launched another unlimited offensive, this time eastwards of the line Orel—Sea of Azov. It would appear that their intention was to sweep forward to the Volga between Saratov and Stalingrad, and then swing north on the line Moscow—Kazan.

If so, had this campaign been successful, the complete occupation of the vital area would have followed, and once again the unlimited offensive would have succeeded.

As it happened, soon after this attack was launched, the stubborn resistance of Voronezh utterly ruined it. Instead of persisting against that city or calling the offensive off, the German High Command diverted the attack southwards, and, like a torrent, it poured down the west bank of the Don, to exhaust its momentum outside Stalingrad and near Grozny.

When winter once again set in, the German situation was vastly more precarious than the year before. With probably fewer men than they had in 1941, they had now to hold a front nearly half again as long as the one they failed to hold in the previous winter. Obviously their wisest course was to retire whilst the going was good and so shorten their front. Instead, they persisted in assaulting Stalingrad, which, even had it fallen, could not have bettered their position radically.

Once again the inevitable happened. Directly the frost set in, the Russians resorted to a series of limited offensives, and as the snowfall last winter was exceptionally light, they were able to keep them up until early spring, by when they had forced their enemy to withdraw to his starting line and in places west of it.

Looking back on these four campaigns, certain lessons stand out boldly.

The first is that the unlimited offensive is only a justifiable operation of war when the probabilities are that the vital area of operations can be overrun in one grand assault.

The second is that, as in war nothing is certain, however powerful the offensive means may be, it is a gamble to rely on them unless the defensive means are equally powerful.

The third is that the German theory of war is based on fair weather conditions and road movements. As they are superior to the Russians in staff duties, thus far they have proved themselves superior to them in summer fighting.

The fourth is that, on vastly extended fronts and in an intensely cold climate defensive winter warfare becomes all but impossible once the frost sets in and so long as depth of snow does not halt wheeled cross-country movements.

Further, that as in Russia the winter and thaw last seven months, fine weather fighting is limited to four, allowing one month in which to prepare for winter conditions.

The fifth is that, in so short a period as four months and in so vast a country as Russia, the unlimited offensive, when shackled to marching forces, is not a practical operation of war, and especially so in face of an enemy accustomed to abandon large stretches of his country without moral loss.

With these five lessons in mind, it will be interesting to see whether, in the forthcoming campaign, the Germans have learnt them, and, if so, how they turn them to account, either offensively or defensively.

May 31, 1943

IIIXX

PROBLEM OF INVASION

THE CENTRAL PROBLEM IN AN OVERSEAS INVASION IS BUT A TALL EDITION OF THE one which has faced every general in every battle that has ever been fought on land, and, incidentally, will ever be fought. It is the problem of reach or, put otherwise, of crossing no-man's-land, however narrow or however broad, in order to come to grips with the enemy on its far side.

This may be called "the constant tactical problem", not only because it is constant throughout the history of war, but also because, during peace-time, the whole course of weapon development has been directed towards solving it or preventing its solution.

For instance, when, in the fourth century B.C., Greeks fought each other with ten-foot pikes, no-man's-land was from four to five yards wide—the combined length of two opposing pikes, less that part of their shafts necessary to hold them. Tumbling to the idea of reach, Philip of Macedon doubled the length of this weapon, and, by doing so, went far to enable his son, Alexander the Great, to conquer the world of his day. Because, directly, the reach of his pikemen was doubled, and, indirectly, the reach of his enemy's was halved.

Let us carry the story a little further. The Macedonian pikemen went down before the Roman legionaries, largely because the Roman javelins outranged the reach of their 20 ft. pikes, and, in turn, during their Punic Wars, the Romans suffered many reverses because the Carthaginian slingers outranged the Roman javelin men.

Thus tactical developments proceeded, invention following invention, until we come to the opening of the present century, when we find that, in a purely bullet war, such as was fought between ourselves and the South African Boers, no-man's-land has grown to from six to eight hundred yards in width, and still how to cross it remains the problem.

When, in 1899, this war was declared, in the main we were prepared to fight a bayonet war—a war of short-range attacks—and at high cost we learnt our lesson. Next, in 1914, when the First World War opened, we were prepared to fight a rifle war, and, as it happened, our rifle fire was superior to that of all other belligerents.

Nevertheless, the problem of how to cross no-man's-land remained unsolvable, because the attacker having to move as well as fire, the volume of his fire was less than that of the defender who stood still. As Private Richards says in his book Old Soldiers Never Die,: "The enemy rose up and started to advance. They were stopped at once; with the parapet as a rest for our rifles it was impossible to miss. The attack was over before it had hardly commenced 10 men holding a trench could easily stop 50 who were trying to take it." So impossible did movement across no-man's-land become, that Lord Kitchener exclaimed: "I don't know what is to be done—this isn't war!"

The solution first attempted was a perfectly sensible one, it was to base attacks on the gun, which vastly outranged the rifle. So long ago as the Russo-Turkish War of 1877-78, the Russian General Oukeneff had written: "Artillery will become the scourge of mankind... The day cannot be much longer delayed when the artillery shall raise itself from being an auxiliary to the rank of the principal arm."

Also, in the Russo-Japanese war of 1904-5, Major J. M. Home, a British officer attached to the Japanese army, came to the same conclusion, for in one of his reports he wrote:

"The great impression made on me by all I saw is that artillery is now the decisive arm, and that all other arms are auxiliaries to it. The importance of artillery cannot be too strongly insisted upon, for other things being equal, the side which has the best artillery will always win." This, however, proved to be erroneous, and because of a curious miscalculation on the part of the tacticians. They did not grasp that the width of noman's-land must be measured by the range of the principal weapon—the gun—and that, therefore, in trench warfare, it includes not only the narrow stretch of ground which separates the two entrenched rifle and machine gun fronts, but also the two zones of defensive works flanking it and up to their main gun positions. As these positions were some 6000 yards behind the respective entrenched fronts, the total width of the artillery no-man's-land—that is, the belt of ground separating the opposing guns—was roughly twelve to thirteen thousand yards.

Consequently what happened was this: In the great artillery battles of 1916-17, though artillery invariably enabled infantry to cross the no-man's-land flanked by rifle fire, and also, as often as not, to push deep into the enemy's defences, gunfire so destroyed the forward communications that it ended by

bunkering the guns.

Whereas, when attacked, the defender could, with comparative ease, move his guns back and build new defences to protect them, the attacker could only with extreme difficulty move his guns forward. The upshot was that by means of artillery fire the full depth of no-man's-land was seldom crossed, and even when it was, the difficulty of moving the guns forward as well as of supplying the advanced infantry, normally, neutralised the success.

In idea, the next solution attempted was a dual one: to cross the bullet swept no-man's-land under the protection of armour, and then to penetrate the main section of the enemy's half of the artillery no-man's-land by means of self-propelled guns which, by dispensing with barrage fire, would not destroy the ground and in consequence would not impede forward movement.

The upshot was the introduction of the tank, which is nothing other than

a self-propelled armoured field piece.

Though the next development is more radical still, the problem remains unchanged. The flying machine in the form of the bomber—aerial artillery—so increases the width of no-man's-land that, to all intents and purposes, it becomes an everyman's land, for not only are entire countries included in it, but also entire seas. Nevertheless, in essentials the problem remains as it was in the days of Philip of Macedon, but now stretched to a gigantic scale.

As an example, let us look at our present Mediterranean problem—the invasion of Sicily, Sardinia and Corsica, possibly also of Italy, Southern France or Greece. The ultimate no-man's-land is the area lying between the opposing

bomber bases.

In turn, it includes three subordinate no-man's-lands:

(1) The area between the fighter bases:

(2) The area between the effective fire of the defender's coastal batteries and the guns of the invader's fleet, and

(3) The area between the landing craft as they ground on the one side and the beach defences on the other.

As the first step in the solution of every no-man's-land problem is the destruction or neutralisation of the power of the enemy's principal weapon, and as to-day this weapon is the bomber, how best can it be accomplished?

The answer is (1) by attacking its bases and (2) by depriving it of its fighter support, because it is this support which gives it its effective battle range—a

fact largely overlooked by the Germans in 1940. Therefore, the defender's bomber and fighter bases become the primary "artillery" objectives; for, once they have been "silenced," command of the air is won, and, until it is there can be no certainty of a successful clinch.

Further, there can be no assurance of a continuity of movement once the

clinch has succeeded as was the case in 1916-17.

Strange as it may seem, the latest development in tank tactics—namely, the combination of tank and anti-tank weapon—finds its counterpart in the air in the combination of bomber and fighter working hand in hand. Hence, though in their days, General Oukeneff and Major Home could see only dimly the outline of the problem, their vision has been proved correct. Artillery has become "the scourge of mankind," and, "other things being equal, the side which has the best artillery will always win."

June 9, 1943

XXIV

BACK TO ATTILA

RECENTLY I READ: "NAPLES IS A SMOKING HEAP OF RUINS, TURIN LOOKS LIKE A ghost city. Milan could not be recognised, with her empty streets, collapsed bridges and ruined quarters blotted out during the R.A.F.'s recent raids. Masses of people are deserting all the great cities."

What does this and the many other bombings of the war remind one of? The return of Attila, who, in the year 452, swept into Italy and wiped out Aquileia, Julia Concordia, Altinum, Padua, Vicenza, Verona, Brescia, Bergamo, Pavia and Milan. Yet it is not we who are to blame, we who have suffered the like, nor do I think is any single belligerent, because the crucial question is, not who first unleashed this hurricane of destruction, but that all nations were ready to unleash it. In such a circumstance it could not be other than inevitable.

Should it be considered that Attila and his Huns are somewhat remote, to which I agree, then all but an exact parallel to what is now happening can be found in the Wars of Religion, which blazed their hideous trail across the years 1562-1648. These wars coincided with the general adoption of fire-arms, which rendered warfare more total than it had been before, a totality which the aeroplane has now brought to its apex.

This series of wars, terminating in the appalling Thirty Years War (1618-1648), like the present war, was largely an ideological conflict. Though armies remained small, the common people were dragged into it by violent propaganda. So much so that they "came to believe it a sacred duty to kill their enemies for the purification or preservation of the true religion as the case might be."

Its ferocity beggars description. "Do you think my men are nuns!" cried Tilly, and 30,000 people are butchered in Magdeburg. Central Europe was reduced to a desert; mothers ate their children, and the bodies of criminals were sold as meat. Twelve million people are said to have perished. In Bohemia the population sank from about 2,000,000 to 700,000, and in a district in Thuringia, where, in 1618, 1717 houses had stood in nineteen villages, only

627 remained in 1649, and of the 1773 families which had inhabited them but 316 were left. Worst of all, it was the richer areas which suffered most.

Then, magically, out of this utter exhaustion, war was suddenly transformed. In the eighteenth century, it became a royal game circumscribed by precise rules. All violence to the civil population was prohibited, and armies were kept small, their soldiers being highly disciplined. Their object was not to annihilate each other, far from it, for instead it was to manuævre each other into an impossible position and then cry, "checkmate!"

Marshal Saxe said: "I am not in favour of giving battle, especially at the, outset of a war. I am even convinced that a clever general can wage war all his life without having to fight one." And Massenbach wrote of Prince Henry, the brother of Frederick the Great: "More successful than Cæsar at Dyrrachium, greater than Condé at Rocroi, he, like the immortal Berwick, won the victory without a battle."

Truly a funny way of fighting; and yet, when one comes to think it over, really a very sensible one. For if you hold that war is part and parcel of human nature, then it logically follows that, the more its ravages are restricted by universally accepted rules, the better it is for all concerned.

What were the rules behind this strange—at least so it seems to us—way of fighting? Much as they are in Chess. Stakes are thrones, inheritances, royal marriages and territories; armies are pawns, bishops, castles, etc.; each move must be weighed against risks, and no question must arise as to right, wrong, good, evil or even justice; for, were a moral issue to intrude itself, one of the players might lose his temper and kick the table over, when the game would be spoilt. To insult or exasperate an opponent would have been considered the height of bad manners, and no eighteenth century king ever dreamt of doing so.

This type of war, which could only be successfully played by men of honour, lingered on certainly until 1832, when an incident occurred which contrasts strangely with war as it is fought to-day.

That year Marshal Gérard and 60,000 French troops marched on Antwerp, the citadel of which was held by the Dutch under General Chassé. In order to spare the citizens the horrors of war, Chassé agreed to direct the fire of his guns solely on the plains, so long as Gérard agreed to approach from no other direction. This plan was decided upon. Then we read: "Rarely, if ever, was a siege conducted with so much chivalry and courtesy... The stipulations regarding the neutrality of the city and the restrictions of the line of fire of both parties are noteworthy, and so well were they carried out that not a single non-combatant beyond the lines was harmed in person or property."

Exactly one hundred years later, what do we see? The crowded city of Shanghai is bombed from the air; thousands of harmless Chinese—men, women and children—are blown to pieces, and tens of thousands are rendered homeless. From thence on, this barbarous method of fighting has grown and grown. In Abyssinia thousands of Ethiopians have been scorched with mustard gas; in Spain, village after village has been laid low, and now, in World War No. 2, Warsaw, Rotterdam, London, Coventry, Pearl Harbour, Manila, Cologne, Essen, Naples, Milan, and hundreds of other cities have been pulverised. Indeed, a veritable deluge of destruction has engulfed the world.

How has this come about? It emerged from out of the French Revolution,

when you had either to agree to chew the ideal of liberty as proffered to you by the Sans-Culottes, or else swallow a cannon ball. Thus ideology returned to the field. Then came Napoleon with his unlimited ideas about fighting. Propaganda was next unleashed and the manhood of entire nations conscripted. Thus wars ceased to be the affairs of kings and became the affairs of peoples. This was noted by Marshal Foch when he wrote that their goal was "not of a dynastic interest, not of the conquest or possession of a province, but the defence or the propagation of philosophical ideas in the first place, next of principles of independence, of unity, of non-material advantages of various kinds."

What can we do to mitigate this madness, for madness it is? To imagine that we can do anything much during the war is doubtful; for it would need a heart to heart talk between Mr. Churchill, President Roosevelt, Marshal Stalin, Herr Hitler, Signor Mussolini and the Mikado! No, we can do little now, except strive our utmost to win the war as cleanly as we can and in the shortest possible time. For the longer it endures, the greater will be the destruction.

Only when it ends will the grand opportunity present itself. Will the victors seize it? Or, once again, as after the last war, will they attempt to hocus-pocus war away? In 1928, fifty-six nations solemnly outlawed war, and to-day fifty-six nations, or thereabouts, are frantically engaged again in cutting each other's throats. Nevertheless, war, like a disease, can be limited; yet also, like a disease, it cannot be abolished in toto.

Therefore, what the victorious nations must look for is a war astringent, such as our ancestors discovered, or rather agreed upon, in the eighteenth century; for, as history has proved, again and again, no firing squad can solve the war problem, because it is the firing squad mentality which is at the bottom of the whole trouble.

Should they fail to do so, then, may I ask, what sense is there in planning a new world on old social, political and architectural lines? Before me lies a booklet entitled *London Replanned*. Though its illustrations are those of a super-Athens under a super-Pericles, a tiro can see that they are also super-bomb targets.

Surely, the Royal Academy Planning Committee should think again; for if we are to survive World War No. 3, would not it be more expedient to place our cities, towns, and villages 500 feet below ground, and cultivate allotments on their present sites? Then, and only then, we shall be comfortably placed to bob up and down between making "cookies" to bomb our enemy's cabbage patches, and grub up potatoes to satisfy the austerity of the next Lord Woolton.

June 11, 1943

XXV

THE IRON DUKE

ONE HUNDRED AND TWENTY-EIGHT YEARS AGO TO-DAY NAPOLEON WAS BROUGHT to final ruin on the field of Waterloo. On the evening of June 18, 1815, as the sun hung low in the west, Marshal Ney, Duke of Elchingen, Prince of the Moskowa, "Le plus brave des braves", riding his fifth horse, led the Emperor's

Guard though the smoke-laden air towards the Allied batteries, which were drawn out in a crescent from the Brussels highroad to the slopes around Hougoumont.

At eight o'clock the attack having spent itself, "there rang out the dread cry which no field had heard before—'La Garde recule' "—the Guard gives way! Echoing over the battlefield, it paralysed the French and electrified the Allies.

The moment for the coup de grace had come, and Wellington did not miss it. Spurring his horse to the edge of the plateau he took off his hat and waved it in the air. At once the signal was understood and obeyed. Amid the shadows of the twilight and to the sound of drums, bugles and pibrochs, 40,000 men poured down the slopes.

Thus was brought to its end the greatest war in our history up to the year 1815.

Of all who won it, and there were many great men in those days, after Nelson's death in 1805, Wellington must take the first place. Therefore, seeing that we are to-day once again locked in a world struggle, it is of more than passing interest to look back on him; for, by doing so, may not we be fired by some inspiration which will fortify us in our endeavours.

Wellington was of middle height, slight and wiry; his face was rather long and his nose aquiline: "the sight of it amongst us", wrote Sir John Kincaid during the Peninsular War, "was worth ten thousand men any day of the week".

Physically his endurance was remarkable. He ate and drank little "We dined on rations: no wine and no money!" wrote one of his officers in 1812. He slept on a twenty-inch camp bed, and could sleep at any time and in any place.

He was practical in his dress and simple in his requirements; one of his officers said: "I suppose no army ever had less baggage", and another: "We had no unnecessary drilling, nor were we tormented by that greatest of all bores uniformity of dress". So little did Wellington worry over it, that he saw nothing peculiar in General Picton riding at the head of his troops carrying "a huge white umbrella lined with green."

A voluminous writer and profound student of war, he cultivated an unshakeable self-confidence and control. He was never elated by success or depressed by failure; yet I feel that his chief assets lay in his power to bear responsibility, in his integrity, moral courage and profound common sense.

Humbug he simply could not endure. When quite an old man, once a gentleman assisted him across Piccadilly, and expressed in fulsome words the honour done to him. In reply, all the thanks he got was: "Don't be a damned fool, Sir!"

This realism was reinforced by an acute sense of humour. For instance, during the Waterloo campaign, when he was told that the French general Cambronne had exclaimed: "The Guard dies, and does not surrender!" looking around and noticing a group of elderly Brussels cocottes, known as the "Old Guard", he replied: "They do not die, and surrender always!"

But sometimes he could be bitingly sarcastic. In 1815, when at the Court of the Tuileries some of Napoleon's generals, who had become Royalists, turned their backs upon him, and Louis XVIII attempted to excuse their rudeness, his Majesty received the following reply: "Sire, they are so accustomed to turn their backs on me, that they cannot break themselves of the habit!"

As a strategist Wellington was a truly great artist, because he possessed the faculty of being able to combine foresight with common sense, consequently he never allowed his imagination to run away with his reason. He possessed a clear and calculating brain.

Not only could he weigh up space and time factors with extreme accuracy, but above all he realized how Nelson's victory at Trafalgar could be exploited on land. Once he said: "All the business of war, and indeed all the business of life, is to endeavour to find out what you don't know by what you do."

And it was because he was so careful a student of events, that in 1809 he saw that the main problem of the war was one of lines of communication and supplies and not of numbers of fighting men, and that, in this respect, England held the trump-card—command of the sea.

When that same year he was appointed to lead a new expedition into Spain, before taking over his command he placed before Lord Castlereagh an appreciation entitled "Memorandum on the Defence of Portugal", which Sir Charles Oman, the historian of the Peninsular War, rightly acclaims to be "a marvel of prophetic genius"; for in it he predicted the whole course of the six years' campaign.

That he was able to fulfil this far-sighted programme is all the more remarkable, seeing that when, on April 27, he took command of his army, he found it but a quarter equipped. Of commissariat there was practically none; there were no ammunition columns, no ambulances, no pontoons and no siege train. The men were in a bad state of discipline; many of his officers disloyal; his staff inexperienced, the cavalry very weak and the artillery totally inadequate and drawn by oxen.

What did he do? As he says: "There is but one way to do as I did, to have a hand of iron". By sheer force of will he shook these fragments of an army into a fighting force; crossed the Douro, occupied Oporto, pushed deep into Spain, and, on July 27-28, beat the French, under Joseph, Jourdan and Victor, at Talavera.

In spite of the fact that until the close of the Peninsular War his army was almost always outnumbered by the French, he realized that a small army which was adequately fed was superior to a larger one dependent on foraging. As Sir Charles Oman says: "Wellington's salvation lay in the fact that he could hold his entire army together, while his adversaries could not." Even more than Napoleon he saw that "an army marches upon its belly"; in other words, that there is a definite relationship between bread and bullets.

His army being small, he was compelled to be prudent; yet it is a great mistake to consider, as many have, that he was no more than a cautious general. Though a master in defensive war, he could, when conditions were favourable, be audacious in the extreme, as he was at Assaye and Argaum in 1803, in the Vimiero and Talavera campaigns, and in his stormings of Ciudad Rodrigo and Badajoz. His Fabian tactics were sheer common sense: when conditions demanded prudence, he was prudent, and when they did not, he struck like a thunderbolt.

In order to protect his men and also to mystify the enemy, he seldom failed to make the fullest use of cover by ground. Because of this, at Vimiero, Junot was completely deceived, and, at Busaco, Masséna mistook the British centre for its right. At Salamanca it was the same, and also at Waterloo.

One remaining fact must be mentioned, for, combined with his use of ground, it raised him to the position of a supreme tactical artist. It was that he saw everything for himself, relying only upon secondhand information when it was impossible for him to do otherwise. As he said: "The real reason why I succeeded... is because I was always on the spot—I saw everything, and did everything for myself."

Though throughout the Peninsular War, which was an exceedingly difficult one, Wellington's foresight never failed him, it is strange that in his last campaign, the most decisive he fought—namely, that of Waterloo—he was caught napping. Undoubtedly he misjudged the Royalist strength in France, and

was deceived as to the nature of Napoleon's movements.

Yet, also, I think that, at the time, there were too many attractive women in Brussels, for on June 13, we learn that, when Napoleon was but thirty or forty miles away, Wellington "took Lady Jane Lennox to Enghien for the cricket match . . . apparently having gone for no other object than to amuse her." And it is somewhat instructive to find him at 3 a.m. on the nineteenth—that is, on the morning immediately following the battle—writing to Lady Frances Webster—"a very pretty woman"—to tell her she might remain in Brussels "in perfect safety."

Anyhow, according to the Duke of Richmond, late on the fifteenth, during the famous ball given by his wife, Wellington said to him: "Napoleon has humbugged me, by G——! he has gained twenty-four hours' march on me," which he certainly had done; but was it he who had done the humbugging?

June 18, 1943

XXVI

VICTORY BY SLIDE-RULE

VICTORY BY SLIDE-RULE IS ONE OF THE OLDEST OF WAR GAMES. IT IS BASED ON the axiom that twice one are two, and, conversely, two is twice one. In other words, that God marches with the bigger battalions, and that, therefore, superiority of numbers, mass, weight or quantity is the secret of victory.

Some of us may still remember, during the first year of the last war, a writer of distinction conclusively proving that, for lack of copper, the German armies could not for long continue in the field. Cut off as they were from world production, the date of their demise could be exactly calculated by deducting wastage in copper from home production plus stocks in hand. Yet, as we know, Germany fell back on substitutes—soft iron driving-bands, etc.—and carried on for over four years.

To-day, another distinguished writer has returned to the charge, and

from the opposite angle of the quantity theory, he writes:

"If the present bomber offensive against Germany could be multiplied by four, her war production would be completely halted," because "the present scale of bombing is directly reducing the enemy's war effort by some 24 per cent."

Next, to prove his point, he enters upon what he calls "a cold mathematical study" based on man-hours. "Modern warfare," he points out, "is founded on the man-hours available to a fighting nation." This reveals that out of a working population of some 47,000,000 Germans (a) 19,000,000 are employed on essential civil industries, and (b) 7,000,000 on war production, a "total of 26,000,000 directly affected by bombing." If the scale of bombing is sufficient to destroy or disorganise the whole work of (b), then German war industries must fail, and should (a) come to the rescue of (b), the German civil industries must eventually collapse. Further, as, unlike ourselves, when we were bombed, Germany has to-day no surplus man-power to fall back on, bombing presents her with "a sort of Hobson's Choice." She can do three things: "(a) Divert men from war production to repair works; (b) take the necessary resources from civilian activities; (c) leave the damage unrepaired."

On sectional paper this appears conclusive, and for all I know, as the war proceeds, it may actually prove to be so. Nevertheless, there is a fly in this numerical ointment, and as history has proved, again and again, not a mere midget, but a veritable pterodactyl. It is this: wars are not fought on drawing boards, nor are victories to be measured in pints. War is every whit as much a game of chance as a game of calculation: it is poker as well as chess, and even in chess there is no slide-rule certainty.

That, in this age of machine warfare, man-hours of work are a tremendous asset, no sane person will dispute; yet, as assets, they are no more than the equivalents of man-hours of fighting in the days when one man one pike or one man one rifle were the instruments of destruction; for the aim of both is numerical superiority.

Many years ago now, Mr. Lanchester, the eminent engineer, wrote a book called Aircraft in Warfare: the Dawn of the Fourth Arm, and in it will be found what he calls the "N-Square Law." By it he proved that "the fighting strengths of . . . two forces are equal when the square of the numerical strength multiplied by the fighting value of the individual units are equal." Further, "the fighting strength of a force may be broadly defined as proportional to the square of its numerical strength multiplied by the fighting value of its individual units." Later on he added, "Superior moral or better tactics or a hundred and one other extraneous causes may intervene in practice to modify the issue, but this does not invalidate the mathematical statement."

Obviously, this is true; yet, in spite of Sir James Jeans's hint that "the universe appears to have been designed by a pure mathematician," throughout history the god of war has proved himself to be a bloody fellow, whose worshippers are capable of winning as well as losing their wars by making the most extraordinary mathematical blunders. Add up a string of figures, and there can be but one correct answer; yet who can with certainty predict the outcome of a single battle?

The reason is that "superior moral or better tactics or a hundred and one extraneous causes" always intervene.

For example, when, in 334 B.C., Alexander the Great with 45,000 men set out to invade Persia and her millions, could any mathematician have predicted that he would end by conquering the known world of his day? When, in 1519, Cortés with 553 soldiers, 14 cannon and 18 horses started

on his gold hunt in Mexico, what were the odds on or against his overwhelming the powerful empire of Montezuma? Again, who, in 1757, would have predicted that Clive and his microscopic army of 615 Europeans and 2,362 Indians would win at Plassey a victory over Siraj-ud-Daula and his 50,000, and thereby found our Empire of India?

It is absolutely true in war, were other things equal, that numbers—whether men, shells, bombs, etc.—would be supreme. Yet it is also absolutely true that other things are never equal and can never be equal. There is always a difference, and it is the differences which by begging to differ so frequently throw all calculations to the winds. In the case of Alexander, genius, leadership and a pike of double length. In the case of Cortes, genius, magic and 18 horses. In the case of Clive, genius, audacity and a forged treaty.

Except for pikes, horses and treaty, none of these things is measurable or weighable. In war, many other imponderables could be added, such as the squeak of a hedgehog, which one dark night threw into panic an entire cavalry regiment.

Let us, however, get back to our 'osses-mathematics. In 1915 I remember attending a G.H.Q. conference in France, assembled to consider the most rapid way of beating the Germans.

A general of enormous distinction and of a mathematical twist of mind opened the pow-wow by exclaiming: "Shells, more shells and still more shells—haw! haw!" Then he stepped up to a blackboard on which was chalked the British front divided into sectors, and elaborated his thesis as follows: "The Germans have one million men on this front (wave of his billiard cue). They have, therefore, 200,000 men in each of these sectors (dot, dot, dot, dot, dot, with ditto). 100,000 in front and 100,000 in rear—what is the answer?"

Not waiting a second for anyone to reply, he yelled once again: "Shells, more shells and still more shells!" (a dramatic pause of two seconds followed). "How?" he bawled, "don't you see—each sector is 15 miles long and two broad; divide 'em into square yards and plump a shell on to each damned yard of 'em . . . what, then, can the b—— Boches do?"

Though but a humble and recently promoted Major, aged thirty-seven, I rose and exclaimed—"Bolt!"

"What do you mean by 'bolt'?" he snapped. To which I replied: "As an infantry soldier I have always been taught that, should men come under artillery fire, the first thing they do is to scatter."

"Scatter, be damned," he shouted back, "how can you scatter trenches? Think again, sonny, small children should be seen, but not heard."

Though I could dilate at length on this type of mentality, space forbids; for I must hurry back to our bomber mathematician.

In spite of Hobson's choice—see above—what is there to prevent German war industries from scattering? Have not we scattered ours? Did not the Germans begin to scatter theirs long before the war, and is it to be supposed that they have ceased doing so since its outbreak? Also, have not the Russians done so? Were not we told in 1941 and 1942—and as they are our allies, no doubt with appropriate exaggeration—that they moved entire munition works from the Donetz Basin to beyond the Urals?

In 1916-17 we crumped uncrumped areas into crumped areas, and then re-crumped crumped areas into re-crumped, crumped, crumped areas and so on. The damage we did was appalling; yet, all said and done, in twelve months, we crept at most twelve miles nearer to Berlin.

As Berlin was 480 miles away, had these mathematics continued, to-day we should have reached the Weser, and, in consequence, the whole of the Ruhr would be ours, and there would now be no need to crump it. We should be infinitely better placed than we are at the moment, and, incidentally, there never would have been a World War No. 2. Oo sez—"Three cheers for mathematics!"

June 26, 1943

XXVII

WASTE NOT WANT NOT

IN A RECENT SPEECH, GENERAL MARSHALL, CHIEF OF STAFF OF THE U.S. ARMY, is reported to have said: "We have seized the initiative, the most vital factor in war." Is that so? for, in my opinion, the most vital is economy of force.

Why? Because however stupendous the resources of a belligerent may be, there is always a limit to them. Consequently it follows that, other things being equal, should two opponents possess identical resources, the one who makes his last the longest must win.

Though this equality is never realizable, the argument nevertheless remains relatively true, because waste of force is a depreciation of capital which, even should it not lead to defeat, must of necessity be carried as a debit into the peace which follows the war. From this it will be seen that, "unless each operation in proportion to its cost contributes to future success, it either hastens defeat or diminishes the value of final victory."

Clausewitz touched on this supremely important question when he wrote: "Every unnecessary expenditure of time, every unnecessary detour, is a waste of power, and therefore contrary to the principles of strategy." This means that, though chance in war must always be guarded against by holding in hand a reserve of force, war is not governed by chance but by law—the law of economy of force, or more precisely put, the law of the economical expenditure of force, and the punishment for disobeying it is waste.

Like all nations who have tasted prosperity, we are by habit exceedingly wasteful. This, to-day, is proved by the tonnage of salvage we collect for re-use, which before the war we destroyed. This habit to waste we have carried into war in the form of a tactical principle, the aim of which is right enough—namely, the destruction of our enemy's fighting power; but the means whereby it is attained are more often than not wasteful in the extreme.

For instance, in the first war I ever took part in, the South African War of 1899-1902, as there were few things, such as railways, roads and bridges to destroy, in 1901 Lord Kitchener determined to make the area of operations a waste. This meant the burning of all farms and the herding of women and children into concentration camps.

"The new policy was not prolific of success," so says the *Encyclopædia Britannica*. "The enemy invariably dispersed before superior forces and the removal of the women and children from the farms did not have the effect of disheartening the burghers as it had been anticipated—it rather mended their vitality by relieving them of responsibility for their families' welfare."

So long as the farms stood, the burghers visited them and could easily be rounded up. When they were reduced to charred ruins, they did not—why should they?—and the tactical result was that their capture became many times more difficult.

Two other effects should not be overlooked. The first was, that after the war a loan of £35,000,000 had to be issued to make good the wastage, and the second that the bitterness this wastage left behind it is not even yet outgrown.

In our next war—World War No. 1—as the destruction of farms was a mere bagatelle, we set about destroying small towns and villages, and though much of this destruction was unavoidable, much of it was not. For instance, until well into 1918 the towns of Albert, Bailleul and Armentières were occupied by us. Though knocked about by the Germans they were not only inhabitable but inhabited, and at Albert, as many remember, the Virgin still hung by her toes head downwards from the half-ruined tower of the cathedral.

In March and April that year we lost these towns, whereupon our gunners got busy. Down came the Virgin, tower and all. Within a fortnight not a house in Albert was left standing, and a week or two later Bailleul and Armentières were as flat as pancakes.

What for? True, the Germans were deprived of a number of advanced billets; nevertheless, was this destructive game really worth the candle? I doubt whether it shortened the war by a single day or a single hour; besides, at the time, the Government was at its wits end to find the man-power essential to carry on the war.

Read Mr. Lloyd George's Memoirs on this subject, and, then, tot up the shells fired and convert them into man-hours of work. From this simple calculation it will be seen what economy of force means.

With this picture in our mind's eye, let us next step into the present war: what do we see? Farms are not even noticed and small towns are pulverised in ten minutes. This time we are out after bigger game.

Whole industrial areas are laid flat and great cities are gutted in an hour. As I write, *The Times* informs us—"Barmen 'Wiped off the Map'" and then comments: "One thousand acres of devastation in a town of 200,000 inhabitants means that, to all intents and purposes, that town has disappeared." Bearing this disappearance in mind, it will be interesting to watch how often in the future Barmen will be wiped off the map again; for most of these German towns seem to be extraordinarily adhesive so far as cartography is concerned.

Granted that all this destruction is necessary—Dusseldorf, so far as my reckonings go, has been wiped off the map slightly over a hundred times—was it really necessary to expend the enormous amount of ammunition we recently did on the Island of Pantellaria?

Look at the problem. In extent this island is considerably less than one-third the Isle of Wight. It is mostly volcanic rock, lacks fresh water,

was inhabited by some 9,000 civilians and garrisoned by 15,000 Italian soldiers, of whom, we are told, only one regiment of three battalions was "anything like good." It was completely cut off from Italy, and, therefore, from all succour.

Obviously from the point of view of economy of force, the correct thing to do was to neutralize its one and only airfield, and then leave it alone until lack of water and provisions compelled its surrender. In any case it could do us no possible harm.

Instead, what did we do? In all 3,000 bomber and fighter bomber sorties were made against it. Thus writes one correspondent:

"A greater load of bombs was dropped on Pantellaria's 30 square miles than on any target of similar size; it was more than was dropped through the whole of April on all targets in Tunisia, Sicily, Sardinia, and Italy; the total must have been millions of pounds. So great was the air traffic over the island yesterday [June 10th] that several times during the day scores of aircraft were kept circling over other formations waiting for their turn to drop their bombs."

What the devil for?

As our memories are apt to be short, this is what another correspondent says:

"Overhead whirled masses of allied aircraft. Fortresses, Mitchells and Bostons flew over in formation. . . . Then the whole harbour seemed to erupt like a volcano as the bombs dropped. Sticks of bombs fell right across the harbour defences and away up the mountain side, until the entire area was blotted out by a curling mass of brown smoke rising thousands of feet. . . . Forty miles from the island we could still see one gigantic pall of smoke."

What the devil for? Did we not want the harbour for ourselves, and, as it could not harm us, why then destroy it? When we got it, this is what yet another correspondent reports: "The docks and roads were so deeply torn by shells and bombs that progress was very slow and difficult." And he might have added, as it was on the Somme in 1916 and at Ypres the year following.

If all this was really necessary in order to ungum a postage stamp of an island, what force shall we require to unstick the whole album—Europe?

No, General Marshall, I am sorry to have to disagree. Though the initiative is a very great thing, a far greater thing is—how are we going to exploit it with economy of force?

In this respect, let us remember the fable Æsop unfortunately missed. Once a big game hunter, annoyed by a mosquito, seized his elephant gun and banged at it again and again. When, at length, he got the beast, he found a lion peeping through his tent-door, and, having no ammunition left, perforce he had to grab his fly-flap.

June 30, 1943

XXVIII

THE ECONOMIC CONSEQUENCES OF THE WAR

DEFEATING AN ENEMY AND WINNING A WAR ARE NOT NECESSARILY COMPATIBLE. Far from it, because in certain cases they may actually be irreconcilable. instance, when the causes which gave rise to a war are carried over into the peace which follows it. In this case the peace can be nothing other than a prolonged armistice. Such was the "peace" established in 1919, because the causes of the last war were never eliminated or even restricted. were they? They were predominantly economic, as I will now show.

After 1871 Germany became an industrial power, and after 1877 a highly protected one, dependent on free markets. Next, though too late in the field to achieve much, she turned to colonial expansion, and lastly she established a system of peaceful penetration which was counter-attacked by hostile tariffs.

To force her economic policy on her neighbours she raised the most powerful army, and to force her will on her overseas competitors she built a fleet second only to our own. Every time a hostile tariff was raised against her, smelling encirclement, she demanded her place in the sun, and when it came to argument, she laid a revolver on the table before opening her mouth. The result was that the nations grew fearful and coalesced against her.

Her expenditure was enormous. Thus it came about that though her wealth increased, her overdraft grew and grew. Behind her perilous banking system stood popular opinion, and whenever her policy was thwarted, a wave of chauvinism swept from the Vistula to the Vosges.

Debt reacting upon policy, Germany was haunted by the fear of bankruptcy. To keep solvent she borrowed heavily, and though interest was high, for a time she got what she wanted. In October, 1911, she needed 300,000,000 francs, which, had it not been for the Agidir incident, France would have lent to her at 3 or 4 per cent. As France closed her purse, she turned to America, who loaned this sum to her at six or seven.

Thus she plunged towards the abyss, and as Morton Fullerton wrote in his prophetic book Problems of Power (published in 1913): "There are many indications that the German rulers may eventually come to regard a war as the sole solution for the life and death economic problems with which they are confronted."

Though Germany's war guilt was considerable, it was by no means unique, for all the greater powers were partners in the general racket of loans, favourable balances, tariffs, embargoes, favoured nation clauses, markets and the hunt after raw materials. In short, world civilization was economic; the war begotten by it was economic, and the struggle itself was not so much a struggle between armies as between manufactories. The link between all these economic items was politics—the expression of industry and finance in the language of diplomacy.

In 1919, and shortly after the Peace Treaty was signed, there appeared another prophetic book. Its author was John Maynard Keynes (now Lord Keynes) and its title was, The Economic Consequences of the Peace.

be read:

"I believe that the campaign for securing out of Germany the general costs of the war was one of the most serious acts of political unwisdom for which our statesmen have ever been responsible. To what a different future Europe might have looked forward if either Mr. Lloyd George or Mr. Wilson had apprehended that the most serious of the problems which claimed their attention were not political or territorial but financial and economic, and that the perils of the future lay not in frontiers or sovereignties, but in food, coal, and transport . . . Neither of them paid adequate attention to these problems at any stage of the Conference . . . Yet the financial problems which were about to exercise Europe could not be solved by greed . . . The possibility of their cure lay in magnanimity."

In the twenty years which followed the publication of this book, event after

event proved Keynes's vision to have been exact.

In the main the causes of war had been financial and economic and not political or territorial. Since 1871 the Western World, and no small part of the Eastern as well, had become an industrial unit, in which each national group of industries formed a vital part of the whole vast productive world machine. Yet, instead of grasping the obvious fact that, for the whole to work smoothly, German industry must be granted its "place in the sun"; for years on end industrial life in Germany was paralysed by the penalties and restrictions of the Peace Treaty, and throttled by reparations and hostile tariffs.

The result was the crippling of the whole of Central Europe, and the disease was only eventually mitigated by the vicious system of financing the chaos. Loans poured into Germany—and the consequence? In the end the victors of 1918 not only paid for the war they had fought, but also for the damage they had done to German industry after winning it.

With this picture before us, let us turn to to-day.

The first fact we should notice is that, in spite of the idealism of the Atlantic Charter, our war aims are mainly political and territorial, and not economic and financial. We are out to destroy National Socialism and Fascism, root, trunk and branch, and to reinstate the defeated nations. Our means, however, are not political—the clash as of old of armies; but, inversely, industrial—the destruction of enemy industries by bombing.

Every few days sees another industrial city wiped off the map. City after city in the Ruhr is crumpled into ruins. Next, as the hours of darkness lengthen, so will city after city be stricken in Silesia, Bohemia and Austria. Finally, as the Germans are, more and more, reduced to depend on the industries of the occupied countries, the factories and industrial centres of France, Holland, Belgium, etc., will be laid in ruin. Thus, in the end, the entire industries of Central and Western Europe will be wrecked, and when the last factory chimney collapses, Germany will collapse with it and the war will be won.

Not at all—and why? The answer is, though Germany will be utterly defeated, the economic conditions which the peace treaties of 1919 established, will need no peace treaty to establish them. They will be established, creeping

and crawling over ten billion tons of rubble.

In 1920 or even in 1921 a few strokes of the pen could have cancelled out much of the damage done in 1919; but when all that took two to three generations to build up has been pulverised into dust, will not it take a series of five years' plans to rehabilitate it?

Do let us be realists. It is not a question of criticising what we are doing. It may be right or wrong, more probably it is inevitable. Nevertheless, do let us understand what we are doing and observe its results.

Should the present forms of attack continue for another year or so, and should Germany then collapse, a complete industrial vacuum will have been created in Europe. There will be no trade and no possibility of trading for years. Those who have a surplus of food may gorge themselves, but those who have none will starve.

"No," answers the critic, "the United Nations will feed them." True, but can they feed them or will they be inclined to or allowed to by their respective peoples until the damage done has been repaired? If they are allowed, then those peoples will have to pay for the damage as well as for the war, as happened last time. For, in this machine age, industries are as vital as food, not only for Germany, or for ourselves, but for the entire world.

This will mean years of grinding taxation, of toil, of rationing, of low wages, of small profits—of general discontent. Democracies, however great their human values may be, are nevertheless fickle. Will those who shout for victory to-day, cheer its laurels to-morrow?

Directly the war ends, human reason will begin to reassert itself, and the peoples of all countries, devastated or untouched, will reflect on its economic consequences. What will those reflections be? May not they be coupled with curses?

Will another Fullerton arise and predict the imminence of yet another cataclysm? Will another Keynes write, this time in a book called *The Economic Consequences of the War*: "I believe that the campaign which secured the industrial destruction of Europe was one of the most serious acts of economic unwisdom for which our statesmen have ever been responsible"?

July 1, 1943

XXIX

OUR INITIATIVE—OUR CHANCE

IN HIS ADDRESS TO THE HOUSE OF COMMONS ON HIS RETURN FROM AMERICA, Mr. Churchill said: "To have the initiative is an immense advantage. At the same time it is a heavy and exacting responsibility. Left to itself opportunity may easily lead to divergency." This is very true, but, first of all, what is the initiative?

In the civil mind, and also, I think, in many military minds as well, it is to be in a position to attack instead of to defend, and, therefore, to be so placed that the enemy is kept guessing where and when the blow will fall.

Though this is true, it is not the whole truth, because freedom to choose the objective is in itself valueless, unless freedom of movement and power of action are added to it.

Further, when these two requirements are examined, it will be discovered that it does not necessarily follow that the initiative is in every case the perquisite

of the attacker. Far from it, for if to date the war has taught us anything, it is that, should the means at the disposal of the attacker be inadequate, not only may he easily lose the initiative, but also find that the sole result of his efforts has been to transfer it to his enemy.

From this it will be seen, as Mr. Churchill has said, that to possess the initiative is at all times "a heavy responsibility." Further, and I trust I shall make it clear, that the number of opportunities—courses of action—which the initiative offers is a danger, unless the objective selected is a practical one.

More than once in his Correspondance Napoleon pointed out that the most dangerous thing in war is to change, what he called, one's "line of operations," and indirectly he hinted at what he meant by saying: "The line of operations can never be the line along which one has advanced, because marches are governed by events."

More clearly put: that the line of operations is governed by the objective, and irrespectively of the fluctuation of events—marches, victories, set-backs, and even defeats—it must be maintained until the objective is gained. It

is as much a mental as a physical line.

From this it follows that a change in the line of operations carries with it a change of objective, and as this means a fresh start, it also means that the energy already expended has largely been wasted. Such a wastage, I maintain, the Germans have suffered on account of a faulty use of the initiative, as a little history will make clear.

Both the Napoleonic and First World Wars conclusively demonstrated that he who would be master of Europe must gain mastery of the seas. Napoleon recognized this when he exclaimed: "Let us be masters of the Channel for six hours and we are masters of the world." But William II and his General Staff did not, for in the last war the U-boat counter-blockade was largely an afterthought, and no direct invasion of the British Isles was ever contemplated.

In 1805, Nelson's victory at Trafalgar brought all possibility of a successful French invasion to a full stop. Thence onwards Napoleon's sole chance of winning was to bring the war to a stalemate. This meant its prolongation until his "implacable enemy"—ourselves—preferred peace to a furtherance

of the struggle.

In 1810, after his victory over the Austrians the year before at Wagram, the initiative was his to turn on Wellington, then operating in Spain. Had he done so, he would have followed his true line of operations. For, as he could not invade England, by annihilating Wellington he would have emasculated British sea power by depriving his enemy of their main continental bridgehead; for sea power, to be fully effective, demands two termini—a port of call as well as a port of departure.

Instead, in 1812, and in order to enforce his Continental System—his Lebensraum—he turned on Russia, and it was this change of objective which ultimately sealed his fate. For, paradox as it may seem, the vast expanse of that country denied him the necessary freedom of movement by putting such a strain on his power of action that he was "crushed" between the Russian refusal to fight and the inability of his supply trains to sustain his army.

In 1914 we see a far more clumsy edition of this error. This time Germany

held the initiative, and we, as before, command of the seas. Once again, only because command of the sea could guarantee to William II complete victory, and as such, without a German Trafalgar, was all but impossible, his sole chance of winning the war—a war on two fronts—was first to knock out the French, next the Russians and then carry the war with ourselves to a stalemate.

Instead of doing this, he and his staff committed one of the gravest strategical blunders ever made. On August 25th, thinking that the French and ourselves, then in full retreat, were already defeated, the Eleventh and Guard Reserve Corps, at the time besieging Namur, were ordered to the Russian front. This withdrawal reduced the strength of the German right wing, which loss of force was the major cause which compelled its retirement from the Marne.

In both these cases, the initiative was lost because the attacker changed his line of operations by turning against Russia. And in the second (as in the first) had the original objective been maintained—namely, the overthrow of the French and British armies—and won, once again the implacable enemy—ourselves—would have been deprived of his bridgehead and the full use of his sea power would have been denied to him.

With these two object lessons before them, it is truly amazing that Hitler and his Staff repeated this enormous blunder for a third time.

In September, 1939, when the Germans invaded Poland, except for one item, common to both the Napoleonic and First World Wars—namely, that the command of the sea and more particularly of the Channel was ours—the initiative was theirs.

Therefore, unless this time we could be conquered by air power or forced to surrender through counter-blockade—sea-power—complete victory was not to be looked for. All worked to plan until the Battle of Britain, which clearly showed, though Hitler had full freedom of choice of objective, that he did not possess the requisite freedom of movement to bring his overwhelming military power into action.

As direct attack was frustrated, was not it still possible to mount an indirect attack, which, though it would demand a new line of approach, would still leave the line of operations unchanged? I think it was, had Hitler forthwith decided, as at the time I believed he would, to wrest from us our sole remaining bridgehead within reach of Europe—Egypt—and thus deprive our sea power of its most important strategic overseas terminus.

To effect this, two operations were imperative. The first was the occupation of the Balkans, in order to neutralize Turkey as well as threaten Egypt from the north, and the second was the occupation of French North Africa, followed by the establishment in Libya of a powerful army to move eastwards on Egypt.

Though the first of these operations was carried out with complete success, the second was neglected until too late, and why? I hazard in answer that Hitler and his Staff failed to appreciate the inner meaning of sea power. They failed to grasp that an island power, so long as it commands the seas, in spite of the number of land battles it may lose, can never fully be deprived of the initiative.

Conversely, this means that any continental power, even should it win every land battle, cannot achieve complete victory against a coalition of powers

in which we are a member, so long as the initiative at sea remains ours. Though, for months and even years on end, this initiative may lay dormant, all that is required to awaken it is the establishment of a bridgehead within striking distance of the enemy. Such a naval terminus we possessed in Egypt, for in spite of the vast distance, except for the 800-yards-wide Bosphorus, an army can march every mile of the way from the Pyramids to St. Sophia.

As in 1812 Napoleon neglected Wellington in Spain, and in order to establish his Continental System, changed his line of operations to Russia, so, in 1941, did Hitler do the same, and, apparently, in order to complete his *Lebensraum*. He neglected Egypt and plunged into Russia, and, as was the case with both Napoleon and William II, there he lost the initiative.

Now it is ours and because of Egypt—how shall we turn it to account? No mere onlooker can answer this question; yet each of us can say this: It will depend upon the choice of our objective, and whether such freedom of movement and such power of action as we possess are sufficient to enable us, once the attack is launched, to maintain our line of operations until that objective is won.

July 5, 1943

XXX

TEN DAYS THAT CHANGED THE WORLD

IT ALL BEGAN WITH THE Jesus, A SHIP LOANED BY QUEEN ELIZABETH TO JOHN Hawkins who, when homeward bound from the West Indies in 1568, sought refuge from a hurricane in the roadstead of San Juan Ulua, close by Vera Cruz. There a dispute arose with the Spanish Admiral Don Francisco de Lujan, and in the fight which ensued three English ships, including the Jesus, were sunk. Fortunately, however, for England, Hawkins and his kinsman, Francis Drake, escaped on two pinnaces and arrived safely home.

The loss of the *Iesus* so annoyed the Queen that, when William, brother of John Hawkins, drove a squadron of the Duke of Alva's treasure ships into Falmouth, she appropriated their bullion in payment for her. Reprisal, however, did not halt here, for Drake and Hawkins, holding that they had been robbed, set out on a series of piratical voyages. On the third of these, in 1572, with extreme audacity Drake took and sacked the town of Nombre de Dios on the isthmus of Panama. There he climbed a tree, and, beholding the distant waters of the Pacific, he determined to sail them.

This incident led to the most famous of his voyages, the circumnavigation of the world in 1577-1580, during which he raided Valparaiso, looted Tarapaca, captured the great treasure ship *Cacafuego*, and putting into (or near by to) San Francisco Bay, he took possession of the land in the name of the Queen, and called it "New Albion."

In 1585, these raids culminated in Drake sacking Santiago and Porto Praya in the Cape Verde Islands; San Domingo was gutted; Carthagena plundered; Havana threatened, and at St. Augustine, in Florida, not a house was left standing. A few months before his return in July the following year, Philip II

of Spain determined to put a stop to these maraudings and teach the English a lesson they would never forget.

A plan of attack was, therefore, prepared by Philip's leading Admiral—the Marquis of Santa Cruz. It was to gain command of the English Channel, and then pass the Duke of Parma's army over from Flanders to England. This becoming known, in April, 1587, Drake raided Cadiz, and played havoc with the shipping there. Next, he did the same at Lisbon—the point of concentration of the Armada—after which he made for Cape St. Vincent and devastated the Algarve fisheries, destroying thousands of tons of hoops and pipe-staves for casks. This was a grievous blow to Santa Cruz, because in those days all ships' water, wine, oil, etc., as well as much food was stored in barrels.

Thus was the first Armada wrecked, and most fortunately for England, because, had it been able to sail before the end of September—as Philip intended it should—then, according to Froude, "not a ship could have been brought out to encounter him. Parma beyond question would have crossed the Channel and the battle of English liberty would have been fought not at sea but on shore." Parma was of the same opinion.

Meanwhile Santa Cruz hastened to make good the damage, during which work, most unfortunately for Spain, he fell sick, and, on January 30, 1588, died. He was by far the ablest seaman Philip had, and was succeeded by the Duke of Medina Sidonia, whose sole qualifications were his wealth and rank. To fortify him he was given as his second in command a cautious old seaman—Don Diego de Valdez. Together they took over the Armada, 130 ships, of which 65 were galleons. They mounted 2,431 guns and were manned by 8000 seamen, 19,000 soldiers and 3000 galley slaves. Their total displacement was 57,868 tons—two-thirds of the present Queen Mary!

Whilst Philip was making ready, Elizabeth appointed Lord Howard of Effingham "Lieutenant-General, Commander-in-Chief and Governor of the whole fleet and army at sea", with Drake as his Second-in-Command. At the time the latter was with his squadron at Plymouth, and wanted to put to sea, as he had the year before, and once again attack the Armada in port. On April 13 he urged this action on the Queen, adding: "The advantage of time and place in all martial actions is half of victory; which being lost is irrecoverable."

The upshot was that Elizabeth ordered Howard to carry the bulk of his fleet to Plymouth. This he did, and on May 30, he put to sea, was forced back by contrary winds, and then forbidden to take the fleet to Spain. It consisted of 176 ships, with the *Ark Royal* (800 tons) as Flagship.

Whilst these events were shaping, on May 20 the Armada dropped down the Tagus and stood out; ran into a storm; lost most of its water, which leaked out of the newly-made casks, and sought refuge in Coruña to refit. There it remained until July 12, when again it put to sea, and, on the 19th, sighted the Lizard.

The surprise was complete, for this time it was the English and not the Spaniards who were caught at anchor, thereupon, it being Saturday the 20th, Howard plied out of the Sound, "and being gotten out scarce so far as Eddystone, the Spanish army was discovered" in three divisions.

On the morning of the 21st, about two-thirds of the English fleet "recovered the wind of the Spaniards two leagues to the westwards of Eddystone," and in our history the most decisive battle since Hastings opened. The galleon

Grandgrin was surrounded by Drake, Hawkins and Frobisher, who poured into her a murderous fire "such as never before had been seen at sea." Medina Sidonia bearing up, a two-hours engagement followed. Then Howard broke it off, when, suddenly, the San Salvador carrying the Paymaster-General of the Armada and his chests, blew up and dropped out of the fleet in flames.

On the 22nd both fleets were becalmed. On the 23rd the Triumph, the largest of the English ships (1,100 tons) got into trouble. Then, on the 25th, the battle opened again: Sir John Hawkins lowered his boats and attacked the Santa Ana. Three Spanish galleasses (vessels with oars and sails) came to her rescue, and were beaten off by the Lord Admiral in the Ark Royal and Lord Thomas Howard in the Golden Lion. The wind rising, the fleets clinched, fought, and, at length, out-fought, Medina Sidonia made for Calais. There, on the 27th, he cast anchor between the town and Cape Gris Nez, the English fleet anchoring "short of them within culverin shot."

Little took place on the 28th until about midnight, when the Lord Admiral assembled a council of war in the main cabin of the Ark Royal, which decided to launch a fireship attack on the Spaniards; whereupon eight vessels were hastily

prepared.

Early on the 29th, as all lay still, the Spanish sentries saw several shadowy ships approaching them, and a little while after burst into flames. "Spurting fire and their ordnance shooting, which was a horror to see in the night," Medina Sidonia gave the fatal order for all cables to be cut. Thereupon a panic followed, and amid complete confusion his ships wore in the dark and crashing into each other were borne out to sea.

When morning broke, a triumphant sight greeted the eyes of the English. Right along the coast towards Dunkirk lay scattered the greater part of the Armada, with no possibility of regaining Calais Road, where still the San Martin

and forty other ships were riding at anchor.

The battle reopened at Calais and ran along the coast towards Dunkirk, the hottest fighting taking place off Gravelines. As the crisis approached—it now being six o'clock in the evening—it seemed that the Armada was doomed to inevitable destruction on the banks of Zeeland, when, to the relief of its sorely tried men, a squall of wind swept down upon the contending fleets.

As night closed in the wind freshened to a half-gale, and the next day—the 30th—Sidonia summoning a council of war, it decided that the sole course open was "to return to Spain by the North Sea". So the Armada set out on

the most tragic voyage in naval history.

Swept around Scotland into the Atlantic, ship after ship foundered or was wrecked, and thousands of men died of lack of water. In all, 63 vessels of the original 130 were lost to round shot or storm; whereas the English lost not a single ship.

At length, in the middle of September, a messenger arrived post-haste at the Escurial from Santander, bearing with him the news that Medina Sidonia had returned to that port on the 12th.

When Philip received this fatal intelligence, he was seated at his desk. On

hearing it and without change of countenance he observed:

"Great thanks do I render to Almighty God, by whose generous hand I am gifted with such power, that I could easily if I choose place another fleet upon the sea. Nor is it of very great importance that a running

stream should be sometimes intercepted, so long as the fountain from which it flows remains inexhaustible."

Little did he realize his error. The sluice-gate of a new epoch in world history had been opened—let us glance at the torrent which poured through it.

First, this great victory united the English into a nation; secondly, from 1588 onwards the war in the Netherlands ebbed away, and thirdly, this inflow and outflow placed Protestantism on a firm footing, so firm that for 300 years it was destined to be the creative factor in Western civilization.

Thus was opened the stupendous drama of the Modern Age. For a fraction short of a hundred years—from the Conquest of Grenada, in 1492, to the defeat of the Spanish Armada, in 1588—Spain accomplished extraordinary things. Her sons suddenly stretched out their hands and seized the limits of the known world. Conquering Mexico and Peru, planting colonies in South America, and spreading over the Indian Ocean they gave the name of their monarch to those islands now known as the Philippines.

Then, as suddenly, all is changed: a man arises—Francis Drake—who calls a halt; and within the space of his life he wrests the sceptre of the oceans

from the grasp of the Conquistadores.

In this tremendous drama, the year 1588 is the volcanic point out of which England's dominion flows. From that sea-girdled, spume-flecked island the English spread over the globe, peopling new Englands, winning India and vast colonies, and creating the American nation—New Albion not in dream, but in very fact.

July 23, 1943

XXXI

THIS BATTLE RANKS WITH WATERLOO

EVERY WAR HAS ITS DECISIVE HOUR, AND THOUGH WHEN IT ACTUALLY STRUCK may be a question of endless argument, there can be little doubt that in the first of the World Wars, 4.20 a.m. on August 8, 1918, was such. True, had the Battle of Amiens never been fought, though it is all but certain that Germany would, nevertheless, have eventually collapsed, the fact remains that it was fought, and that it was its winning which irrevocably sealed her doom. Therefore that battle must take its place with Waterloo; yet, strange to say, unlike our great victory in 1815, at the time and for several weeks after August 8 we were unconscious that the knock-out blow had been delivered.

The battle itself was the direct answer to our defeat in March and April that year, which had led to a great salient being pushed into our front between Arras and La Fère, with its apex a little south-east of Amiens. In late May this defeat was followed by an equal one on the part of the French, into whose front, between Soissons and Reims, another great salient was punched with its apex resting on Château-Thierry. Together these salients protruded towards Paris, 40 miles away, like the breasts of a gigantic woman.

Both salients fell victim to the tank.

On July 18, the French Tenth and Sixth Armies, to which were allotted thirteen battalions of heavy and light tanks, assaulted the western flank of the Château-Thierry salient, and five days later it ceased to exist.

Though this victory was complete, strange to say it had little influence on the one soon to be won by ourselves, and the reasons were that the attack eastwards of Amiens was already in preparation, and also because—whatever historians may write—there was no true unity of command. The French fought their battles, and we, British, fought ours, and neither of us thought very highly of the other: we were more prone to jeer at each other's defeats than to cheer each other's victories.

So far as we were concerned, the turning-point was not July 18, but July 4. That day the 4th Australian Division, supported by 60 tanks of the 5th Tank Brigade, fought the small battle of Hamel, named after a village some ten miles eastwards of Ameins. It was a remarkable action, if only for two reasons; (1) It was fought exactly to plan, and (2) not a single tank man was killed in it.

Not since such battles as Zagonara and Mollinella in the fifteenth century, when knights were so heavily armoured that all they could do was to tumble each other out of the saddle, had such a thing happened to the dominant arm.

Anyhow, from that day onwards tank-mindedness grew and grew. The Australians became ardent tank enthusiasts, so did Sir Henry Rawlinson, Commander-in-Chief of the Fourth Army, and even G.H.O. began to unfreeze.

Nine days after this remarkable engagement, Sir Douglas Haig asked General Rawlinson to consider an operation on his front—that is, against the Amiens salient—and four days later a plan was submitted by him for a purely limited battle. Then, as there was very little central direction in the last war, like most of our plans it grew and grew, until on August 5—three days before the attack was launched—it was to all intents and purposes extended to an unlimited offensive.

For those who have to prepare the details of a battle, nothing is more exasperating, for no sooner is some one thing arranged than it has to be modified into some other thing. It is much like training for the 100 yards, and then to be told that the race is to be a furlong, a half-a-mile, a mile and finally a Marathon.

In the end it was decided to engage three corps, the Third, north of the Somme, and the Canadian and Australian Corps to the south of that river, with the French on the right of the latter. The whole of the Tank Corps, less the 1st Brigade, then rearming, and the 9th Battalion, then refitting, was to be thrown in. In all this meant nine heavy and two medium battalions, as well as one battalion of armoured cars—420 fighting tanks with 42 in mechanical reserve. To which must be added 108 supply tanks.

Seldom in the present war has such a mass of armour been assembled on so narrow a front, for from flank to flank the battlefield was but a little over twelve miles in width. Further, and what was in advance of anything found to-day, the 420 fighting tanks, the equivalent of two present-day Panzer divisions could be supplied across country, and were, therefore, from the administrative point of view, more mobile than existing armoured formations.

Another point to note is that, since July 3, No. 8 Squadron R.A.F., equipped with 18 Armstrong-Whitworth machines, had been attached to the Tank Corps. It was under the command of Major T. Leigh-Mallory (now Air

Marshal) and in this battle its tasks were: (1) To drown the noise of the last hour of the tank approach march by flying over the German lines; (2) to keep tank units constantly informed by dropping messages at fixed stations, and (3) to help tanks by machine-gun fire whenever opportunity arose. On August 8, at least three of these machines carried six 25 lb. bombs each. To-day, this figure looks truly Lilliputian.

As at the battle of Cambrai, fought in the previous November, the attack was to be led by tanks, and no artillery registration or bombardment was to precede the assault. In all 82 brigades of field guns, 26 brigades of medium artillery and 13 batteries of heavy guns and howitzers were assembled to cover

the advance.

On August 6; G.H.Q. informed all concerned that the battle would be launched on the 8th, and that zero hour would be at 4.20 a.m.! This news was received by us at Tank Corps Advanced Headquarters at L'Étoile, a quiet little hamlet some fifteen miles west of Amiens, through which, in 1415, Henry V had passed on his way to Agincourt—a happy omen.

On August 7 I motored out towards the front to have a word or two with Tank Brigade and Battalion Commanders. Amiens, long evacuated, once again showed signs of life. Rows of wagons and limbers were parked under the trees, and a tank here and there was to be seen netted in its camouflage. An occasional shell burst over the city, otherwise all was silent. Eastwards everything was exceedingly quiet; few men were to be seen, few guns and no tanks; yet thousands of troops were in position ready to spring forward at the appointed hour.

The 8th dawned; the morning was misty and dry, and at 4.20 o'clock it was still very dark—conditions were ideal for the attack. Then it opened with the roar of 1000 guns, crashing on the Germans in an overwhelming surprise. The tanks crept forward through the gloom, the Australians, Canadians and men of the Third Corps following them. On they slowly swept and irresistibly to a depth of 14,000 yards. By nightfall a complete penetration had been effected and the enemy was in full retreat.

On the 9th, 10th and 11th the battle was continued. In all 688 tanks went into action, many on more than one day; 22,000 prisoners were taken, also 400 guns.

Nevertheless, strangely enough, only our enemy realized that he had irretrievably lost the war, and that we—the Allied Powers—had as irrevocably won it.

Taking all in all, though the Germans fought bravely to the end, they knew that their death warrant was sealed. This General Ludendorff makes clear in his War Memoirs.

Perturbed by the shock of the attack, hastily he summoned his senior subordinate commanders to his headquarters, to learn in horror that "whole bodies of our men," as he writes, "had surrendered to single troopers or isolated squadrons." Worse still, that retiring troops meeting fresh reserves coming up, had shouted at them, "Blacklegs! You're prolonging the war."

"August 8," he says—and I think this clinches the argument—"put the decline of fighting power beyond all doubt . . . Leadership now assumed . . . the character of an irresponsible game of chance, a thing I have

always considered fatal. The fate of the German people was to me too high a stake. The war must be ended."

Thus it came about that the Battle of the Eighth of August, also called the Battle of Amiens, took its place side by side of Waterloo, and, like its great forerunner, to-day its name is inscribed on the roll of the decisive battles of the world.

August 9, 1943

XXXII

CORPORAL JOHN

ON AUGUST 13, 1704, AT BLENHEIM, JOHN CHURCHILL, DUKE OF MARLBOROUGH, and Prince Eugene of Savoy surprised and routed the Franco-Bavarian Army under the joint command of Marshals Tallard and Marsin. It was a remarkable victory, the climax of a remarkable campaign.

When, in 1701, Louis XIV, by seizing the Dutch barrier fortresses, precipitated the War of the Spanish Succession, William III forthwith revived the Grand Alliance of 1689—the chief members of which were Great Britain, Austria and Holland. Also, he appointed the Duke of Marlborough Captain-General of the Confederate Armies. Nevertheless, when early in the following year William died, it seemed as if France's hoped-for hegemony was assured.

England was now ruled by a woman of no marked ability—Queen Anne—Holland was wrapped up in dismal selfishness, and Austria was in her normal state of decrepitude. In all our history, no more hopeless a situation has faced a General-in-Chief until the summer of 1940.

Notwithstanding, though his initial campaign of 1702-03 was ruined by the treachery and insubordination of the Dutch, early in the summer of 1704, by one of the most astutely planned and daringly executed marches ever undertaken Marlborough carried his army of 90 squadrons and 51 battalions, of which respectively 19 and 14 were British, from Bedburg, near Cologne, to Donauwörth on the Danube, where he was joined by Prince Eugene.

Meanwhile, Marshal Tallard crossed the Black Forest and linked up with Marsin. Together, on August 12, they pitched their camps on the top of a gentle rise about a mile to the west of a marshy brook called the Nebel. The right of Tallard's line rested on the village of Blenheim, its left on the village of Oberglau, to be prolonged north-westwards into hilly country by Marsin's army.

The position appeared so strong that, though Marlborough and Eugene at Donauworth were but a few miles away, both Tallard and Marsin pinned their faith on their enemy retiring, for they refused to believe that the Duke and the Prince would be so neglectful of the rules of war as to launch a frontal attack upon an equal force so strongly posted. Both armies numbered between fifty and sixty thousand men.

Unfortunately for the two Marshals, Marlborough's rules were not theirs. Having reconnoitred the Franco-Bavarian position, he decided that, whilst Eugéne engaged the enemy's left, he would attack his right and centre. So it

came about that, at two o'clock on the morning of the 13th, the joint armies moved westwards towards their sleeping enemy.

At seven o'clock, the mist rising, the French outposts took alarm and fired two pieces. Yet, even then, Tallard could not believe that he was about to be attacked. A little later, as the allied columns came steadily on, the truth suddenly dawned upon him, whereupon he ordered the drums to beat and the trumpets to sound. At once pandemonium swept his camps.

Again Marlborough and Eugene reconnoitred their enemy. This done, it was decided that, whilst Eugene attacked Marsin, Marlborough would assault the villages of Blenheim and Oberglau, in order to pin down the French infantry, and then advance his cavalry between these villages and smash Tallard's centre.

An artillery duel opened; the Nebel was bridged; the chaplains conducted a service, and, by 12.30 p.m., Lord Cutts, known as "Salamander," twice assaulted Blenheim. The result was that the French, losing their heads, poured reinforcements into that village until it was jammed with men. Much the same happened at Oberglau.

So the battle raged until four o'clock, when the whole of the Duke's centre having crossed the Nebel, with trumpets blaring and kettle drums clashing, the mass of his cavalry swung into a trot and rent Tallard's army asunder. A panic followed, and pursuit followed panic.

At seven o'clock, the Duke, drawing rein, hastily scribbled on the back of a tavern bill the following pencil note to his wife:

"I have not time to say more but to beg you will give my duty to the Queen, and let her know her army has had a glorious victory. Monsieur Tallard and two other Generals are in my coach and I am following the rest." Within ten days this note was delivered in Windsor.

Thus was won the Battle of Blenheim, the greatest English battle fought on foreign soil since Agincourt. It crumpled up the grand design of Louis XIV; it plunged his armies into disgrace, and, as Mr. Churchill has written, "it changed the political axis of the world."

This is no exaggeration, for had Marlborough been defeated, the Elector of Bavaria would have replaced the house of Habsburg on the Imperial throne; Munich would have ousted Vienna, and the Empire itself would have become a satrapy of France.

From Blenheim until the end of the war Louis XIV was thrown on the defensive. In 1713 hostilities were terminated by the Treaty of Utrecht, by which England obtained from France Nova Scotia, Newfoundland and Hudson Bay: thus the expulsion of the French from North America began. Also, she obtained from Spain Gibraltar and Minorca, and so founded her naval power in the Mediterranean.

Let us glance now at the man who, above all others, accomplished these several things, John Churchill, son of Sir Winston Churchill, born at Ashe, near Axminster, on June 6, 1650. In 1667 he was gazetted to the King's Regiment of Foot Guards (now the Grenadier Guards) and between then and the outbreak of the Spanish War of Succession he saw service both on land and sea, having learnt much from Turenne, under whom he served in 1674.

Courteous and patient, he possessed what so few men of genius ever possess—the power to tolerate fools gladly. Though his courage was of the highest,

his imagination vivid and his common sense profound, his master-characteristic was his self-control in all circumstances. Nothing unbalanced him, whether it was the stupidity of his allies, the duplicity of the politicians or the ability of his enemies.

As a general he possessed the rare virtue of seeing a war as a whole, and of being able to relate sea power to land power and strategy to politics. Nothing escaped his observation, and no detail, tactical or administrative, was too minute for his examination. A master of stratagems, he consistently mystified his enemy; a master of detail, his men were never in want. In the planning of a campaign he took infinite pains and in its execution infinite trouble. In an age which believed the defensive to be the stronger form of war, he invariably sought to bring his enemy to battle, proving conclusively that a vigorous offensive is normally the soundest defence.

As a statesman, a diplomatist, an organizer, an administrator, a leader of men, a tactician and a strategist, he stood head and shoulders above his contemporaries. To his men he was affectionately known as "Corporal John". In all, during the Spanish War he fought ten campaigns, he never lost a battle and he never failed to take a city he had besieged.

In every branch of the science and art of war his genius shone. Yet it was in his strategy that it sparkled the brightest; for, as I have noted, he could link land to sea power. From 1702 onwards he saw that, for an island power, strategy must be founded on the seas, their command, their control and their exploitation.

He possessed a full understanding of amphibian warfare, and he saw "how the Mediterranean might prove the Achilles' heel of France". "To the unsurpassed richness of his military renown," writes Sir Julian Corbett, "we must add the greatest achievement that British naval strategy can show."

In 1702 he aimed at the occupation of Toulon. In 1704, as part of his Blenheim campaign, he aimed to take Gibraltar, and Admiral Rooke took it on July 24 that year. In 1708, largely at his insistence, Minorca, after stubborn fighting, passed into British hands.

Thus, out of this now long distant war, England, as Admiral Mahan says, emerged "the sea power instead of one of the sea powers." This we should remember to-day, August 13, 1943, and more than remember it, for we should salute the memory of the great Englishman who founded our Imperial might in the very waters in which once again we are fighting, in order to frustrate the establishment of yet another hegemony over Europe.

August 13, 1943

IIIXXX

A STRAIGHT TALK TO THE POLITICIANS

WINNING THE WAR IS THE ONE THING WE ARE ALL AGREED UPON, AND TO WIN IT we must first defeat our enemy. This is as clear as a pike staff; but what is not so clear is that winning depends not merely upon defeating, but above all an how the enemy is defeated; for though our means are physical our end is

moral. Peace is a matter of give and take, whereas war is a matter of snatch and

grab, and, all said and done, peace is our ultimate goal.

In peace our supreme aim should be to prevent war, and in war it should be to re-establish peace, a peace freed from the diseases which caused the war, at least as free as we can make it.

War, therefore, should be looked upon as a surgical operation and not as an execution—a hangman's job. For, however culpable our enemies may be, only a few extreme fanatics would suggest that the world would be bettered by liquidating them to the last man, woman and child.

We are not a horde of blood-thirsty savages who look upon war as a scalp hunt. We are a brave and reasonable people who have made up our minds not only that war must be restricted, but above all that wardom must be done with,

and massacre will not help us in this.

How and by what means? Though, at present, we must leave the answer o our leaders, we are not such fools as to suppose that this problem will be olved by leaving the causes of the war as they were before its outbreak and sas they are still, and then jam on the top of them a supra-national police force. This is like bandaging up a wound with poison in it. To say the least, it is shocking bad political surgery.

What have our leaders done? So long ago as August 14, 1941—two years back yesterday—Mr. Churchill and President Roosevelt met and signed a document we all know by the name of "The Atlantic Charter". In it they made known as they then wrote, "certain common principles in the national policies of their respective countries on which they base their hopes for a better future

of the world."

As my readers may not have a copy of this document at hand, I will here, in condensed form, set down its eight points:

- (1) We seek no territorial or other aggrandizement. (2) No territorial changes without the wishes of the people concerned. (3) The right of all people to choose their own form of government. (4) All nations in equal terms to have access to world trade and raw materials.
- (5) Social security and improved labour standards for all. (6) All men in all lands to live their lives in freedom from fear and want.
- (7) Freedom of the seas for all nations. (8) The abandonment of the use of force.

Well, if we can establish these eight points, even if only point 6, we shall have done something far greater and far more glorious than merely forcing our enemies to collapse; for, like skilful surgeons, we shall have cut out of the social bodies of the nations—our own included—the causes which led to the present devastating conflict.

We shall not only have won the war, but shall have slain the dragon— Wardom, and got back to Christendom or Common-Sensedom, in which, both

within and between nations, people give as well as take.

Common-Sensedom, which in no way clashes with Christian principles—for it is founded upon them—is merely living and acting in accordance with what is obviously good in the world—what is true, beautiful, just and honourable—instead of exploiting what is obviously evil—greed, fear, jealousy and hate. This latter course, I am sorry to say, all nations followed before the war, and it is folly to deny it.

To-day, with the Atlantic Charter before us, we are moving in the right direction, yet the trail we are following is no more than a jungle track. fore, what our leaders should now do is to widen it-how?

By amplifying this Charter into a Gospel for all nations. By defining clearly the means they intend to use in order to establish a world free from fear and

This is what the nations yearn to know. They want a ladder to reach up to the promised heaven, and will never be content merely to gaze at the spires and towers of a dream city gleaming above the war clouds. They want to know now to get to it. Men are real things and they want real things.

Instead of doing this and broadcasting to all: Here is the Gospel of the New Way and the Good Life. Accept it freely and fully, lay down your arms, open your frontiers to our armies and the war ends, what have our leaders done?

By rigidly fixing "Unconditional Surrender" as the sole means of terminating hostilities, they have, in my opinion, committed the greatest act of unwisdom as yet recorded during the war. Instead of opening a channel whereby the floods of war may be drawn away to irrigate the lands of peace, they have dammed these floods up. The result is that unpredictable consequences now face us.

To begin with, though the laws and usages of war recognize the unconditional surrender of armies and fortresses, they do not contemplate or legislate for the unconditional surrender of an entire nation. A nation capitulates, it does not hands-up like a surprised patrol. And, according to the Hague Convention of 1907, "Capitulations agreed upon between the contracting parties must take into account the rules of military honour."

Because this is so, an unconditional surrender cannot possibly be an "honourable capitulation" as we have been told. Quite the reverse, for it strikes at the dignity and self-respect of a nation, reducing its entire people to a mere scum

of humanity, to be passed, like cattle, under the conqueror's yoke.

What does this mean politically? It means that, should our enemy's Government agree to accept such degrading terms, it will at once lose respect in the eyes of its people, and every mishap and misfortune which follows such a surrender will be blamed upon it. This is likely to lead to political and Surely the one thing the victor should wish to avoid.

What does it mean strategically? So many things that I must here restrict

myself to one-our immediate problem.

First of all it should be evident that, though our aims must be fixed, as they are in the Atlantic Charter, our means of attaining them must be as flexible as The reason is that, because in war circumstances are always changing, our means must fit them as they change, and our means are all the methods we employ in defeating the enemy-military, economic, political, moral, etc.

Now look at the present situation. Ever since June, last year, when Mr. Churchill and President Roosevelt met in Washington, the aim of our strategy has been to get Italy out of the war, for she is the Achilles' heel of the Axis.

Then came El Alamein, next Tunisia, and now we are in Sicily-what should we do? Not only at top speed get Italy physically out of the war, but morally out of it as well.

Why morally? Because, if the terms of capitulation we demand are generally acceptable to the Italians-that is to say, that by accepting them they do not feel degraded—the remaining German satellites—Rumania, Hungary and Bulgaria—will prick up their ears and whisper: "As our enemies have been magnanimous to Italy, perhaps they will be equally magnanimous to us." Further, will not all those people in Germany who are disillusioned of Nazism do the same?

Surely, if we can unstick the German colossus—cause it through internal heat to melt and fall to pieces—it is wiser to do so than to continue uncondition-

ally to bang our heads against it until it cracks up?

Should any of my readers suggest that this shows weakness, my answer is that to me it shows the sanest moral strength. We are not beasts of prey whose sole aim is to tear our enemies to pieces and then devour them. We are human beings fighting for a new and a better world. To show that this is so, we must be magnanimous as well as stern, and wise as well as valiant.

"Money or your life!" is the cry of the footpad, a slogan upon which no social order can be founded. "Unconditional Surrender" is no less so on an international scale; for even should it bring our enemies to total ruin, no moral world order can arise from such a degradation. It is the negation of the Atlantic Charter: it is the negation of our Gospel of the New Way and the Good Life; for, instead of fostering the idea of freedom, it breathes forth an invincible servitude.

August 15, 1943

XXXIV

THE DUCE OF TEN DAYS

THE SPECULATIONS, RIFE AT THE MOMENT, REGARDING THE NICHE IN THE mausoleum of history which Mussolini will eventually occupy, brought to my mind the rise and fall of a former Italian dictator: a man who, though he ruled for no more than ten days, inspired several operas, the most noted of which is Auber's "La Muette de Portici." Here, then, is his strange story.

In May, 1647, misgovernment having led to a revolt in Palermo, dissatisfaction spread to Naples. There, in a corner of the market-place lived a young fisherman of about twenty-four years old. His name was Masaniello, and he bore a grudge against the Spanish Viceroy, whose police had arrested his wife for obtaining a small quantity of contraband flour.

Talking big about justice and loudly proclaiming how he would set things right, he was jeered at by the people. Failing to rouse them by word of mouth he determined to try a little action, so, on July 6, he collected a number of sturdy lads and sent them shouting through the streets. Seeing in this a fine game, other boys joined in, and in such numbers that in a few hours Masaniello collected no less than 5000. These he formed into companies, armed them with sticks to which were nailed black flags, and, early on the 7th he loosed them through Naples, shouting: "Long live the King of Spain, but let the cursed Government perish!"

This uproar set the city in a tumult in which the rabble soon joined. Thereupon the houses of many of the nobility were stormed. Everything was burnt, even food, money and clothing; nothing was stolen; for, throughout the rioting, Masaniello maintained an astonishing moral discipline by impressing on his followers that, as the property of the nobles had been "gotten by squeezing the poor, it was the heart's blood of the people," and, therefore, was not to be spared for any personal purpose whatsoever.

As the rioters swept through the city, thousands of its better class inhabitants joined the throng, and demanded the restitution of the privileges granted to them under the Charter of the Emperor Charles V. Thereupon, the Viceroy, in order to pacify the people, first attempted to palm off on them a mutilated edition of it. Unfortunately for him the fraud was detected, when rage was turned into frenzy. Forthwith Masaniello ordered the shops of the gunsmiths and sword-cutlers to be ransacked, and whilst this was being done some careless fellow accidentally set fire to a magazine, which blew up, making "a dreadful shock and striking a terror thro' the whole city". Thus, the 7th ended in pandemonium.

The day following, Masaniello marshalled the rabble into regiments. Next he harangued his improvised soldiers and then led them in orderly march through the city. This display of ordered force brought the peasants pouring in from the neighbouring villages, each man armed with a pike or a pitchfork. Nor were the women backwards in their zeal, for in thousands they turned out with fire shovels, tongs and spits, and even the very children were seen with canes and sticks in their hands . . . urging their fathers to battle.

At length the situation grew so serious that the Viceroy decided to hand the original charter over to the people. But he had missed the psychological moment; for Masaniello, having now ransacked the city for arms, had collected many thousands of muskets and pistols, as well as several pieces of artillery. Throughout all this, no looting was allowed, "one poor fellow", we are told, immediately was knocked on the head "for pilfering a small towel."

On the 9th the Viceroy sent the charter to the Cardinal Archbishop. And as he was well received by the mob, it was decided that he should read it to the whole people on the following morning. So it came about that, early on the 10th, Masaniello paraded his army, when it was found to number no less than 114,000 armed men.

All was orderly when the Archbishop arrived in the market place; but unfortunately for him, the unexpected was lurking round the corner. For, as he was about to read the charter, amidst the cheers of the populace a rascal, by name Perrone, appeared at the head of 500 mounted banditti. Resenting this intrusion, Masaniello ordered these ruffians to dismount. As they refused to do so, he urged his men on them. A battle-royal followed, in which 150 banditti were killed. Their heads were forthwith struck off to decorate the market place.

Having now tasted blood, madness seized upon the rabble. A noble, by name Don Pepe Caraffa, who was particularly hated, was hunted down and beheaded. Seizing his severed head, Masaniello struck it with his hand, made a speech to it, and then had it enclosed in an iron grate together with the foot of a man who had kicked the Archbishop during the procession. This done, he blockaded the Viceroy's palace and cut off its water supply.

The next day, the 11th, was the calm after the storm. The charter was read amidst popular acclamation, and the ceremony was concluded by a *Te Deum*. After this, Masaniello, magnificently dressed, rode to the Viceroy's palace, "a tow'ring plume of feathers in his hat, and a drawn sword in his hand," whilst the whole of Naples turned out to proclaim him, "The Saviour of his Country" and to wish him a life of a hundred years.

By the Viceroy he was received with honours due to a prince, and his self-styled rank of Captain-General was officially confirmed. That night bonfires were lit and the church bells were rung, the people dancing for joy and gratitude.

On the 12th, Masaniello started to rule in earnest. First, he raised the siege of the Viceroy's palace. Next, he had a baker, who had made his loaves too light, baked alive in his own oven. Lastly, he drove in his coach to the market place, where he was saluted by the Archbishop as "The Most Illustrious."

The 13th being a Sunday, the charter was confirmed, whereupon Masaniello was once again acclaimed and blessed by the people. This triumph, it would seem, completely turned his head, for nothing now appeared to him to be too extravagant. To display his power, he pressed an escort of 500 armed ruffians, as well as 40 feluccas and a bag of gold, on the unwilling Archbishop of Santa Severina, and, then, to show his bonhomie, he "dispatched him with a kick on the br—ch, saying, 'begone, I make thee Prince of Auversa'."

This display of democratic good fellowship was too much for the people, for they were superstitiously religious, and as suddenly as they had fallen under his sway, as suddenly did they turn against him.

On the 16th, sensing the change popular opinion had taken, he went into a crowded church, and, climbing into the pulpit, he earnestly besought the worshippers not to forsake him. Then, coming down, he was hustled into the street and forthwith shot dead by a small party of assassins sent out by the Viceroy.

This bold action so daunted the rabble that the same people who "from the first commencement of the insurrection had loved Masaniello even to adoration, calmly saw him murdered, and without murmuring suffered his head to be taken off." Then his body was dragged through the city and thrown into a ditch.

Yet the next day a strange thing happened. Some children discovering his corpse, they washed it and carried it on a bier to the cathedral of Carmino and his head being found it was also placed on the bier. This done, the people, once again suddenly changing their mood, resolved that Masaniello "deserved to receive the greatest honours".

His funeral was as astonishing as his brief reign. His bier was preceded by 500 priests and followed by 40,000 armed men and almost as many women. As the procession passed the palace, the Viceroy sent eight pages with torches to accompany it. Also he ordered his guard to lower their ensigns and salute the remains of the man he had murdered.

So the body of the fallen despot was borne round the city and back to the cathedral, to be buried there, and, as a contemporary writer informs us, "amidst the tears and lamentations of an infinite multitude of women, who shewed so much respect and veneration to his dust, that one may say, that by the effect of a popular inconstancy which is not to be equalled, Masaniello, in less than

three days, was obeyed like a monarch, murdered like a villian, and reveer'd like a saint."

With this fickle picture of mass psychology before us, it would, at the moment, seem idle to speculate on the niche the twenty-one years Dictator—Benito Mussolini—will eventually occupy in Italian history.

August 17, 1943

XXXV

THE ATTACK BY TERROR

ON THE PLINTH OF GENERAL SHERMAN'S STATUE IN WASHINGTON ARE INSCRIBED these words: "The legitimate object of war is a more perfect peace". This obviously means that the sole justification for war is that it leaves things better than it found them.

Strange to relate, though the words of this inscription are Sherman's, his most noted campaign—namely, his march through Georgia and the Carolinas during the American Civil War—did more than anything else to render a better peace impossible, because he based his strategy on terror. At the time, this is what he wrote:

"We are not only fighting hostile armies, but a hostile people, and must make old and young, rich and poor, feel the hard hand of war... The truth is the whole army is burning with an insatiable desire to wreak vengeance upon South Carolina. I almost tremble for her fate."

Making little or no endeavour to restrain his men, the whole countryside was ravaged and gutted, or, as we should say to-day, "scorched". In Georgia alone Sherman estimated the damage done at \$100,000,000, of which only \$20,000,000, as he wrote, "inured to our advantage", the remainder representing "simple waste and destruction."

That this return to the methods of Tilly and Wallenstein during the Thirty Years War shortened the Civil War by a day, I much doubt; but that for twenty years following the war it rendered a more perfect peace impossible is beyond question, for it fostered so bitter a hatred between the South and the North that even yet it is not altogether dead.

From this it must not be concluded that terror is not a powerful moral weapon. At times, unfortunately, it is, for instance in the Hunnish and Mongol invasions of Europe. Nevertheless, because its aim is the destruction of the civil foundations upon which military power rests, it simultaneously damages or destroys the sole possible foundations upon which peace can be built. Carried to its ultimate conclusion, terror permits of every form of atrocity being perpetrated in the sacred name of victory. Thus it carries warfare back to the stage it was in during the days of barbaric hunting communities. Then, as the aim of war was to extend the hunting-grounds or obtain better-stocked ones, the method employed was the extermination of their owners. It is towards this type of war that we are to-day rapidly retrogressing.

In considering this problem, it is interesting to note that each change in the character of war has been related to the master-weapon of the period in question. Thus, when lance and horse governed the battlefield, because wars were restricted to combats between the nobles, an elaborate code of honour was followed. The result was that, though, on account of the rudimentary organization of supply, pillaging was frequent, seldom if ever were the common people terrorized in order to force the collapse of the enemy armed forces. Much the reverse, for detailed codes of discipline were promulgated to restrict terror and devastation, because to devastate a region was tantamount to destroying one's own base of supply.

Later, with the introduction of the musket and the bayonet, we find a steady democratization of war. The common man now takes his place in battle alongside the noble or gentleman; yet, generally speaking, from the middle of the eighteenth century onwards to the close of the nineteenth, though wars are increasingly more sanguinary and destructive, terror as a weapon of paralysation is seldom resorted to. A distinct difference is still maintained between combatants and non-combatants, and the lives and property of the latter are generally respected.

Not until the advent of the aeroplane does this division begin to disappear. Whereupon, with increasing rapidity, war takes on an autocratic form. As the flying machine can circumvent armies and fleets as well as attack them, and can cross frontiers within its range whether fortified or open, it can bring military force to bear on the enemy's civil population almost as readily as a dictator can bring political force to bear by means of radio propaganda.

During the First World War the possibilities of this became so clear that, shortly after its conclusion, the Italian General Douhet, in his book La Guerra del' 19 pictures a Franco-German war concluded within forty-eight hours. Though this was an exaggeration, the point to note is that the means he suggests are not, as heretofore, the direct destruction of the enemy's armed forces, but instead the complete destruction of their material and moral foundations—the enemy's industries and his civil morale—by air attack.

Vis-a-vis another European war, the two countries best placed to put this form of war into operation were the United States and our own; for, as both were separated from the continent by sea, neither could directly be attacked by land. Further, both were great industrial powers, and, therefore, fully equipped to carry out autocratic warfare.

This is what has happened in the present war, which is pre-eminently an industrial conflict. Military autocracy has passed into American and British hands; with the result that the worst devastations of the Goths, Vandals, Huns, Seljuks and Mongols pale into insignificance when compared to the material and moral damage now wrought.

Though so recently as May 25 this year, when referring to Italy, Mr. Churchill declared, "We shall not stain our name by inhuman acts", and whereas six days later, Captain Harold Balfour, Under-Secretary for Air, proclaimed, "We are going right on to the end with our bombing attacks, just as long as the peoples of Germany and Italy tolerate Nazism and Fascism"; the fact remains that, once Mussolini's regime was liquidated, the air attacks on Italian cities, instead of ceasing, were intensified. For instance, on August 13, the *Evening Standard* commented on "Italy's 'Heaviest Ever' Raid', and,

on the following day, the *Daily Mail* carried the headline, "Blitz May Force Badoglio Out". Yet Marshal Badoglio has never been a Fascist, and, since his rise to power, it would seem that he has done all he reasonably could do to root out the former regime.

That terror is now the order of the day is beyond contradiction, for it is publicly accepted. For instance, on August 1, the Sunday Express published an article "Hamburg's Week of Terror"—a literally true heading. The Sunday Pictorial of the same date published another—"Hamburg Is 'Dead'," in which it quoted a Hamburg Danish Consular Official as saying: "Hamburg has ceased to exist. When you drive through the city you drive through corpses. They are all over the streets, even in the tree tops . . . I can only tell what I saw with my own eyes—district after district literally razed to the ground." This is confirmed by Reuter who, on August 12, reported, "In two districts—Eimsbuttel and Altona—there is not one stone left untouched." Eimsbuttle I know well, it is purely a residential quarter and far distant from the port. Finally, on August 19, all possible doubt was dissipated by Mr. Brendan Bracken, who said that plans are being made "to bomb and burn and ruthlessly destroy in every way available to us the people responsible for this war" (Daily Mail).

Thus the story of terror might indefinitely be lengthened by including the cities of the Ruhr, Berlin, Cologne, Nuremberg, Turin, Milan, etc., etc. Nevertheless, according to the Archbishop of York, "The real justification for continuing this bombing is that it will shorten the war and may save thousands of lives." Surely one of the most unchristian comments ever made; because the whole teachings of Christ centre in meeting out good for evil and not in invoking Satan to cast out Satan.

Possibly, however, the Archbishop is right in suggesting that bombing will reduce casualties among our soldiers. Nevertheless, speaking for myself and as a soldier, I object to my life being insured by the slaughter of women and children, whether they are Germans or Italians or of any other nation.

Since the Irish massacrings of Cromwell—the moral and political effects of which are still with us—this policy of terror is something quite new in our history. If it is justifiable, then every crime alleged to have been perpetrated by our enemies is *ipso facto* justified, for unlimited terror Satanically sanctifies every possible atrocity.

With such an anarchic beginning there can be no orderly ending. In fact, there can be no peace, only revolution or civil war and the fomenting of an undying spirit of revenge. Therefore it seems to me that the moral is this: though terror can crucify, it cannot resurrect.

August 20, 1943

XXXVI

New Armour: Old Tactics

IT IS A STRANGE THING THAT, THOUGH AGAIN AND AGAIN COMPARISONS ARE struck between the tank and the armoured knight of the Middle Ages, no soldier, so far as I am aware, has in any detailed study troubled to examine the former

with an eye on the latter. This is all the more astonishing, seeing that, during the Christian era, body armour for 1000 years ruled the battlefield. Further, coupled with what may be called "house-armour"—the medieval castle—it went far towards founding feudal society, which, in decline at least, lasted until the rifle, that truly democratic weapon, for a brief space deprived armour of its value.

Its evolution is a romance forged on the anvils of a thousand battlefields. Its dissolution is equally romantic, as was also its resurrection during the last war on the blood-soaked battlefield of the Somme. Then we looked upon it as something novel and wonderful; yet, had we but remembered its antiquity, its history might have taught the much. Let us, therefore, make a brief excursion into its past.

To begin with, we shall see that, during the last three or four thousand years, except for quite short intervals, soldiers of any standing have always relied on some form of armour. One of these intervals, and by no means a full fledged one, began to take shape in the fourth century A.D., and for two reasons. The first was that the mobility of the Gothic horsemen who invaded the Empire compelled the Roman infantry to speed up their movements by discarding their armour. The second was declining wealth; for armour has always been costly.

Two hundred years later, body armour, in the form of ring mail and scale armour began to return, and soon was so generally adopted that in 773 a contemporary chronicler described the march of Charles the Great's army into Italy as follows:

"Then appeared the iron king crowned with his iron helm, with sleeves of iron mail; his broad breast protected by an iron byrnic [coat of linked mail]; an iron lance in his left hand, his right hand free to grasp his iron sword. His thighs were guarded with iron mail; his legs were protected by iron greaves; his shield was of plain iron, and around him and before him rode all his men, armed in like fashion. So iron filled the fields and the ways, and the sun's rays were in every quarter reflected from iron. 'Iron, iron, everywhere', cried in dismay the terrified citizens of Pavia."

In this age the importance of armour may be gauged from two facts: the first is that, again and again during his reign, Charles the Great prohibited the export of armour from his realm; and the second that, in the ninth century, one of the incentives for the Viking raids was the search after armour.

During that century armour was much improved; yet it was not until the middle of the thirteenth that plate armour began to appear. It was so speedily adopted that, before the fourteenth had run its course, we find the knight locked from head to foot in plates of steel like a metal lobster. His horse was also armoured by means of a headpiece, neck piece, front and rear skirts and two flank pieces.

The next century brought medieval armour to perfection, then its decline set in, decorative effect being mainly sought after. Nevertheless, so late as 1631, when the night before his great victory on the field of Breitenfeld Gustavus Adolphus summoned his generals to a council of war, we learn that Sir John Hepburn, General Teuffel and Field-Marshals Horn and Baner hurried to his travelling coach "sheathed in their complete mail".

It was not, as often is supposed, the introduction of the musket which put

armour out of court, for until the coming of the rifle, plate-armour could easily be made shot-proof. It was once again cost, for armies were rapidly growing in size, and more so still the introduction by Gustavus and others of a strategy which demanded longer marches and more rapid manœuvres than heretofore. With reference to this, it should be remembered that medieval armoured battles were exceedingly ponderous affairs. The knight rode a small cart horse, which had to carry from a fifth to a quarter of a ton of rider, armour, accoutrements, saddle, etc. The contemporary pictures of fully armoured knights charging ventre à terre are merely the fashion plates of the period—they didn't happen.

From this brief trip into the past, I will turn to organization and tactics,

from which, so I hold, so much could have been learnt.

In medieval times an army was organized into two groups or wings, the fighters and the foragers, or what to-day we should call the combatant arms and Generally speaking, the former consisted of two types of soldiers, archers and men-at-arms—that is to say, of out-fighters and in-fighters, or those who could fight when at a distance from the enemy and those who fought at close quarters. In turn each man-at-arms—normally a fully armoured and mounted knight—was equipped with both an outfighting and an in-fighting weapon, his lance and sword, or sometimes a mace, whereas the foragers were a nondescript body of armed men, yet tactically an important one, for when the army rested, in order to afford it protection, they drew their carts and wagons around it in the form of a circular field fortress, or larger. Also, when the enemy was approached they did the same, so that the fighters might be protected whilst they donned their armour and made ready for battle, or should they be defeated or become wearied by the fight-which was frequently the case—that they might have a safe refuge to fall back on, for in its day the wagon laager was proof against armoured assault.

When we translate these things into present-day terms, what do we get? First, a tank and an anti-tank wing—fighters and wagon fortress. Secondly, anti-tank weapons and tanks—archers and men-at-arms. And thirdly, that each tank—man-at-arms—should be equipped with two weapons, one for

out-fighting and the other for in-fighting.

What do we see when we turn to present-day armoured warfare? In Africa, for long, our tanks were equipped only with an in-fighting 2-pdr., and it was not until the American Grant machines arrived that we obtained a tank carrying a real out-fighting gun—the 75 mm.—as well as an efficient in-fighter—the 37 mm. Though, since then we have swapped the 2-pdr. for the 6-pdr., one of our latest tanks, the Churchill, still carries but one gun, a 6-pdr., an excellent weapon, yet in out-fighting outclassed by the 75 mm.

Again, only in the last lap but one of the African campaign did we tumble to the vital necessity of close co-operation between tanks and anti-tank weapons (knights and archers) and then solely because bitter experience compelled us to do so; for the real secret of Rommel's several successes was identical to Edward III's at Creey and Poitiers—namely, his skill in combining his "archers"

and "men-at-arms".

Lastly, and possibly the greatest error of all. Though on occasion we have constructed hasty "wagon laagers" in rear of our fighting troops, such as the famous "Knightsbridge Box" during the Sixth Libyan Campaign, we have never

organized our armoured divisions into two wings—tanks and anti-tanks, offensive and protective bodies of troops. Neither, so far as I am aware, have the Germans. Nevertheless, as one eye-witness says, their tactics were based "on the armour always moving with the other arms in close support in the form of a 'box' or moving 'defended locality'." This is an improvement on the method of the knights, for they only rested in their laagers.

In an instructive article on the Russian front, recently written by the Military Correspondent of *The Times*, we read: "On the German side new tactics may be exploited. The introduction of the moving 'box' of all arms, known to the Germans as the *Mot Pulk* and called by the Russians 'the Hog', was up to a point exceedingly effective last year . . ."

My sole remark is, how strangely the word "new" rings in my ears. In the year 1900 the Boer General Piet Cronje—as some of us still remember—made use of a strongly defended wagon laager at Paardeberg. The mcdieval knights frequently did so, as also did Attila, King of the Huns, on the battlefield of Châlons in 451 A.D.

All said and done, novelties in war are extraordinarily rare, and in this age of armoured warfare, one of the surest and speediest ways of acquiring them is to read and re-read the history of armour. Like the Patent Office in Southampton Buildings, it is crammed full of the most unexpected of novelties and, incidentally, some of the most recent.

August 24, 1943

XXXVII

HITLER'S THREE BLUNDERS

ON AUGUST 31, 1939, BY CHANCE I MET IN THE STREET A MEMBER OF THE GERMAN Embassy. Mentioning to him that war seemed inevitable, he agreed and then said: "Do you think you will come in?"

Though to the average Englishman this may seem an extraordinary question, understanding how the German mind works, to me it appeared quite normal. What perplexed him was this: How could a Government without a policy, without a plan and with forces barely adequate to wage a second class colonial war, contemplate fighting Germany?—it was not rational, it was mad!

If my answer did not convince him, Mr. Chamberlain's, on September 3, certainly must have. That day, in turn, each leader in the House of Commons told us that our war aim was the destruction of Hitlerism. But how? Nobody knew and nobody paused to think.

Logically, the Embassy man was ninety-nine per cent. right, and the one per cent. missing—the unit upon which our Empire is founded—was that he, like all his kind, failed to understand that we are not a logical people.

On September 5, Brigadier-General Spears, M.P., told us, that "The Maginot Line begins where it is required and ends where it is no longer needed": so started victory by slogan. On the 6th we were told that the Germans were dropping poisoned chocolates in Lublin; so started victory by atrocity story. On the 7th we were told that leaflets had been fluttered down on Germany

informing her people that they "had not the means to sustain protracted war" nor the money; so started victory by propaganda. And on the 8th we were not told, though I was privately, that our Expeditionary Force was to consist of four divisions without a single tank; so started victory by military action twenty-five years out-of-date.

Thus I could add item to item, day by day, until we come to December 27. That day we were told that the casualties to date sustained by our armies in the field were three men killed and wounded!

However, this illogical Eldorado was not destined to last, for a few months later we were suddenly shot, as from a catapult, out of the war of leaflets, chocolates and slogans into the very middle of the ninety-nine per cent., to be saved, not by the gallantry of the R.A.F., great though it was, but by the English Channel; for without that anti-tank ditch there could have been no Battle of Britain.

From that moment we entered the war of reality, gradually to become strategically-minded, for in part at least we grasped the uncontradictable geographical fact that we were an oceanic and not a pseudo-continental Empire. Nevertheless, instead of relying on strategy to clear a way for tactical action, we relied upon politics, we mixed these incompatibles and blundered into Greece and Abyssinia. Fortunately, however, our enemy blundered worse.

France having capitulated, the German way was clear for a knock-out blow. Not by an invasion of these islands, for the *Wehrmacht* was not organized for such an undertaking; but instead, since the entrance of Italy into the war had bunkered us in the Mediterranean, by driving us out of Egypt.

Had this been done, our sea power would have sustained a truly crippling blow, for our sole remaining overseas' base within reach of Europe would have been wrested from us. In magnitude this blunder surpassed any of our own.

This is by no means an after-thought, for in June, 1941, when Hitler attacked Russia, it seemed to me that his object was, not so much to conquer or subdue that country as to secure an unthreatened line of advance on Palestine and Egypt by way of Anatolia, whilst the Italo-German army in Libya, either operated as a distracting force or as the lower jaw of his Middle East pincers.

Whether, once Russia was invaded, the German aim was the conquest of that country, the occupation of the Caucasian oil fields, or the first step in an advance on Egypt is, however, immaterial, because the gaining of any one of these objects depended on the occupation of Moscow. Moscow is the hub of the Russian railways, and once in German hands the supply of the Russian armies would have been throttled.

That Hitler expected to occupy that city before winter set in is clear, and that he failed to do so was the turning point of the war in the West, as in 1914 had been the failure to occupy Paris. Further, this disaster was in no way compensated for by Japan's entry into the war, because it automatically brought in the United States. Unless Russia could be crushed in 1942 and Egypt occupied that same year, or at latest early in 1943, the industrial power of America was likely by then to add so enormously to Allied shipping, that an invasion of Europe or Africa would become practicable, when the importance of Egypt would greatly diminish.

Forced during the Russian winter campaign to yield ground, Hitler, in the

summer of 1942, launched his second great offensive against the Soviets. Exactly what its object was we do not as yet know. If it was to take Moscow in reverse—that is, from the south and east—or if it was to gain the Volga between Saratov and Stalingrad in order to isolate and then occupy Caucasia, the failure to storm Voronezh ruined both. Voronezh must, therefore, take its historic place alongside Moscow.

Voronezh, standing like a rock, the German tide, following not the strategic line, but instead the line of least tactical resistance, swept southwards. With its left flank on the Don, its momentum eventually petered out at Stalingrad and on the northern foothills of the Caucasus.

The position the Germans now found themselves in was a desperate one. It was not their failure to take Stalingrad that sealed their doom. It was that they had set strategy aside, and by following an easy tactical road had so lengthened their front and the lines of communication leading to it, that they had not man power enough to hold the one and protect the other. The result was that the initiative passed to the Russians, and has remained in their hands ever since.

Meanwhile, in October and November, 1942, the decisive battle of El Alamein sealed the fate of Germany in Africa, and followed, as it was, by invasion of that continent and the Tunisian and Sicilian campaigns, it has led to the regaining in full of our sea and air command in the Mediterranean.

Once again that sea is ours; once again our direct communications between the Atlantic and Indian Oceans are secure. We are back in the position we held in the spring of 1940, but with this difference; France, a strategical liability, has disappeared, and in her place stand the United States, the greatest industrial asset in the world.

The regaining of the Mediterranean, the military collapse of Italy, the crippling of the U-boat campaign in the Atlantic, the loss of German initiative in Russia and the defensive attitude assumed by Japan in the Far East, tactically round off the fourth year of war by leaving the Allied Powers in a supremely strong strategical position. How should they exploit it?

Though, as mere onlookers, we cannot answer this question, all of us can examine its premises. War is a threefold operation, it is political, strategical and tactical. As strategy prepares the way for tactical action, so do tactics clear the field for political action. Which is it to be: Reliance on tactical action or resort to political action? The answer depends upon Allied policy.

Should its aim be the annihilation of our enemies, as suggested by the slogan of "Unconditional Surrender," then tactical action must dominate. Should it, however, be the liberation of Europe, as suggested by the Atlantic Charter, then political action must lead the way.

Which it should be no onlooker can with certainty say. Nevertheless, it is obvious that it cannot be both, because annihilation and liberation are incompatibles, unless the latter means a free ticket to the next world.

Should political action be resorted to, and should it be as successful as our strategical position warrants, it would seem probable that the War in the West may terminate early next year.

Should it, however, fail, then, without in any way being prejudiced, tactical action can be pushed to its extreme.

But should tactical action solely be relied upon and should it fail, the situa-

tion political action will then find itself in is likely to be far less propitious than it is at this moment.

This is all an onlooker can say, for the facts of the case lie locked away in Washington and Moscow, and these two cities are geographically, if not also politically, separated by no less than 5,000 miles.

August 30, 1943

XXXVIII

STALIN'S SECOND FRONT

A SHORT WHILE BACK, WHEN SPEAKING AT DOUGLAS, ISLE OF MAN, MR. HERBERT Morrison, referring to "the next blow" against Germany, said: "there are many parts of the coastline of Europe where our command of the sea and air gives us the power to land."

Be this as it may, the persistent demands of Marshal Stalin for the opening of a Second Front leaves no doubt that, in his mind, there is but one such locality—namely, France and the Low Countries. Conversely, that no landings in Italy, the Balkans or elsewhere will satisfy him.

It is no good burking this, and more especially so as Mr. Morrison also said: "The aim of the allies—their overriding consideration which governs every decision and every action—is to cause the maximum diversion of German strength and the maximum attrition to the German war machine."

Accepting this, then our geographical position dictates that no locality is so strategically suitable to divert and to attrite than the one stretching from The Hague to Brest, the vital section of which is Ostend—Cherbourg. This limits the true length of the Second Front to approximately 300 miles, with an additional 300 for diversions, distractions and feints. The reason is that, though the Atlantic wall will have to be stormed, a direct threat to Paris—the hub of the French railways, and therefore the king-pin in the German defence of France—will force the Germans to fight for that city whatever it may cost.

In considering this problem, one's thoughts are at once carried back to the great artillery battles of the last war. Then two entrenched systems, separated by a no-man's-land of no great width, faced each other. Now two fortified coast lines do the same, and in between them stretches a no-man's-land of water, varying in breadth from 22 miles (Dover-Calais) to 130 (Plymouth-Marlaix).

Then the problem was a threefold one: how to cross no-man's-land; how to break through the enemy's entrenched front, and how to exploit—that is, how to maintain and sustain the advance. Now, though conditions differ, it is the same, but with water substituted for earth and the Atlantic Wall for the German entrenched front.

In 1916-17, and prior to the correct employment of tanks, there were two means of crossing no-man's-land: (1) by silencing the enemy guns and machine guns before the assault is launched, and (2) by covering the assaulters by barrage fire—creeping, jumping or standing. As the first alone was not found sufficient,

the two were always linked together. The sole essential was that the depth of the projected advance should not exceed the range of the mass of the artillery.

To-day these means are translated from the ground to the air. Instead of field, medium and heavy artillery, we have various categories of aircraft, whose objects are (1) to silence the enemy aircraft, largely by destroying them on the ground, and (2) by providing cover in the form of an aerial "umbrella" to the invasion craft crossing the no-man's-land of water. Nevertheless, there is this essential difference: Whereas in 1916-17 the advancing infantry front protected the guns in rear of it from enemy attack, this no longer holds good with aerial artillery, because bomber craft have to be escorted by fighter craft. As the tactical range of the fighter is limited to about 200 miles—100 out and 100 back—unless the assaulting troops can on landing forthwith occupy enemy airfields, the depth of the projected advance is limited to 100 miles from the air starting points.

The assaulters are, therefore, faced by two main problems. The one is the storming of the coastal defences and the other the successive occupation of enemy airfields, so that fighter escort may be provided for the bomber machines, and so that these machines may cover the land advance, and by doing so assist it in maintaining its momentum until the object is gained. I will now examine

these two problems conjointly.

The Atlantic Wall stretches from Narvik to Hendaye on the Spanish frontier, the nature of its fortifications depending on the character of the coast-line they protect. Of this line, seven-eighths are totally unsuited for any type of invasion other than commando raids, and of the remaining eighth, again at least seven-eighths include no port suitable for the disembarkation of a great army.

In fact, along its whole length—omitting the German section—there are but ten ports of any real importance. Therefore, the entire "wall" may be pictured as a series of bastions linked together by curtain walls. The one represented by strongly protected port areas, and the other by chains of observa-

tion posts, sprinkled here and there with strong points.

So long ago as 1932, when examining a collateral problem—the defence of a land frontier—this is what I wrote:

"The defensive zone itself will consist of all territory which if lost will entail surrender. It may be as much as 200 miles in depth. As, obviously, it is out of the question to cover it with a network of defences, I consider that it will be divided into two sub-zones, which I will call 'A' and 'B'. 'A' will consist of a belt of works bordering the frontier, and 'B' of the remainder of the zone. 'A' may be compared to coastal fortresses and 'B' to the old medieval castles which blocked inland approaches; for in it all strategical centres will be defended—such as railway junctions, industrial towns, airfields and the capital. Should zone 'A' be penetrated, then, though the invader will not be confronted by a belt of works, his movements will be restricted by anti-tank and anti-air castles."

Should the Atlantic Wall be organized on this system, which seems probable, then the wall itself is but an outwork of a deep zone of in-works which, though strongly fortified, are likely to be held by minimum garrisons in order to retain in hand the strongest possible counter-attacking forces. These forces are the

mobile element in the entire defensive system, to canalize the striking-power of which all the defences are designed and built.

Such, then, is the defensive problem. What is its solution from the

invader's point of view?

As in 1939-40 the French problem should have been how to combine amoured striking power with the static defence provided by the Maginot Line; to-day ours is how to combine surprise and penetration. It is an air problem and not a tank problem, because the degrees of secrecy and celerity which surprise in an overseas invasion demands are to be found only in airborne forces.

First, the whole of the invading army must be covered by air; because to attempt a landing in face of hostile air supremacy is not a practical operation of war. Secondly, to wrest this supremacy from the enemy demands either the destruction or paralyzation of his fighter forces, which in turn demands the occupation of their airfields. Deprive him of these, and the third step is to isolate the outworks from the enemy's counter-attacking forces by blocking the communications which link one to the other.

Once these three steps have successfully been taken, and all three are air problems, the fourth is the storming of the isolated outworks by seaborne

troops.

From this it will be seen that, as the French in 1939-40 required two armies, a garrison army for the Maginot Line and an armoured striking force, we also require two armies—an airborne and a seaborne. The first to gain mastery over the enemy's fighter airfields and communications, and the second to storm his coastal defences.

Granted that such a dual attack is at least practical, then, seeing that we possess vast and highly trained seaborne forces, is it lack of airborne which for two years now has caused us to jib at establishing Stalin's Second Front?

Should this be so, the only reason can be that we have put most of our eggs

into the big bomber basket.

Mr. Churchill has talked of our policy of annihilation bombing as "an experiment worth trying out". Seeing that he is no novice in things military, it is strange that it has not occurred to him that strategy is not an experimental science, and that it is strategy which should invariably set the tactical pace.

September 7, 1943

XXXIX

THE BAPTISM OF THE TANK

THOUGH THE FIRST APPEARANCE IN BATTLE OF EVEN SO MODERN A WEAPON AS the magazine rifle or the machine gun is either unknown or disputed, that of the tank is definitely fixed, for it was on September 15, 1916, that it passed through its fire baptism on the battlefield of the Somme.

That battle virtually ended and opened a tactical epoch; the one had emerged from out of the French Revolution—the struggle between massed

infantry—the other was begotten by British genius—the struggle between mobile machines.

Like all the great artillery battles of the last war, the Somme was a veritable Moloch fed on human flesh. The casualties were appalling, over 60,000 killed and wounded on the first day. Units came and units went; they moved southwards with ranks bulging, and, a little while later, northwards lean and lank. At the time my particular job was to arrange for these funeral processions within the Third Army area, and, when the battle ended in November, I found that I had written no less than 109 march orders. Total casualties by then—498,054 officers and men.

In the middle of August, as this shuttle of death was working to and fro, strange rumours of a new weapon were whispered around the messes in St. Pol. The centre of suspicion was Yvrench, which lies to the east of the forest of

Crécy.

Under obligations of profound secrecy, accompanied by a sapper officer, I motored over to that townlet on the 20th. As we approached our destination the countryside assumed the aspect of Epsom Downs on a Derby morning. There were scores and scores of cars and hundreds and hundreds of spectators, among whom were Sir Douglas Haig and General Joffre. Everyone was talking and chatting, when suddenly there came into sight the first tank I ever saw. Not a monster, but a graceful lozenge-shaped thing, with beautiful lines and two clumsy-looking wheels behind it.

By the 30th the last of the tanks arrived from England, when all were hurried forward to a place called The Loop. Thus, what was then known as "The Heavy Section" of the Machine Gun Corps entered the battle area. In all, two companies, C and D, whose 53 tanks were distributed as follows: 18 to the XIV Corps, 18 to the XV Corps, 12 to the III Corps—all belonging to the Fourth Army—and five to the Reserve Army. Of these 53 machines four were almost at once withdrawn as unserviceable.

It is all but impossible to realize the situation as it was then. The unknown and the uncertain dominated every thought and action. Many of the tank officers and men had never been in France before, many, as yet, had never heard a cannon shot. Tactics, such as were laid down on paper, had never been tried out. All was novel, experimental and strange, strange to those

immediately concerned and stranger still to the other arms.

Rumour spread and grew. The curious hovered around the tank camps to get a glimpse of the "monsters". One tank officer afterwards said: "It rather reminded me of Hampstead Heath... We were an object of interest to everyone. This did not help on one's work."

Arguments on tank tactics were continuous. Should the tanks lead the infantry, or should they follow them? When a tank refused to budge, "follow" was at a premium, and when its engine started up again, it was at a discount. At length it was agreed that the machines should move off five minutes in advance of the infantry. Thus the tank won its first round.

No special reconnaissances were made. Files of air photographs came flooding in to bewilder and perplex tank commanders. Maps were issued with routes carefully marked, then they were suddenly withdrawn. Next, every three tanks received one set of orders, which had to be memorized and passed on. Finally, at 5 p.m. on 14th September, twelve hours before the

attack was to be launched, all orders were cancelled and verbal instructions substituted.

To make this nightmare complete, each officer and man carried two gas helmets and a pair of goggles in addition to his service cap and a crash helmet. Also a large field dressing and a first aid dressing, a haversack, revolver, water bottle and iron ration. There were eight men to each machine!

"We carried in addition," wrote one officer, "sixteen loaves and about thirty tins of food, cheeses, tea, sugar and milk We also had one spare drum of engine oil and one of gear oil, two small drums of grease, three water cans and two boxes of revolver ammunition . . . four spare Vickers barrels, one spare Vickers gun, a spare barrel for the Hotchkiss and two wire-cutters. We also had three flags for signalling purposes, which unfortunately proved to have been lost when they were really wanted".

Added to all this were two carrier pigeons, 33,000 rounds of S.A.A., six pounder ammunition, a signalling lamp and a telephone and cable, which was to be played out as the tank advanced, so that its commander could inform those in rear what it was like to be in the first of all tank battles!

When these many things are, by an act of the imagination, conjured from paper into the cramped space of a tank's fighting hull with a 105 h.p. engine firing in the middle of it, and exhaust fumes leaking in all directions, personally, I marvel how these first tanks ever got into action at all.

The strain on officers and men was terrific, and it reached its culminating point on the 14th. That day no one got any rest; all were busily engaged in gingering things up, adjusting this and that and making ready. Only now and again did a man pause to listen to the roar of the preliminary barrage.

The night was pitch dark when the tanks moved forward to their starting points. The ground was thick in mud and badly crumped. Out of the 49 machines which started, 17 broke down.

The morning of the 15th was fine and dry, and a thin mist covered the battlefield, when at dawn, as the bombardment grew intenser, the tanks crawled over the front line parapets, the infantry following.

Those allotted to the Reserve Army, and the III and XIV Corps accomplished little. Those of the XV—something. Seventeen in all had, on the night of the 14th-15th, assembled at the Green Dump. From there they moved to their starting points round Delville Wood. Their orders were for eight to advance on the west of Flers and six on the east of that village with four in reserve. Their goal was Gueudecourt and the sunken road to the west of it.

Of the 17, twelve reached their starting points. Eleven of these crossed the German trenches. One, in particular, gave great satisfaction to a body of infantry held up before Flers, by forcing the surrender of 300 Germans. This incident was reported by air as follows:

"A tank is walking up the High Street of Flors with the British Army cheering behind."

Another tank entered Gueudecourt, attacked a German battery and destroyed a 77 mm. gun. Soon after it was hit and put out of action.

Of the 32 which started, nine pushed ahead of the infantry, nine never caught up with them, nine broke down and five were ditched.

Taking all in all, this unrehearsed first performance was better than it

looked. Though but nine out of 49 machines accomplished anything worth while, what they did accomplish was sufficient to show what with better organization and training could be accomplished.

Though the press reports were hysterical—"Juggernauts", "Polychromatic Toads" and "Flat-Footed Monsters" "spitting death at the demoralized Germans", and "stamping down dug-outs as though they were wasps' nests"—the report of the Chief of Staff of the German Third Army Group was more reassuring. On the 16th he wrote:

"The enemy have employed new engines of war, as cruel as effective. No doubt they will adopt on an extensive scale these monstrous engines, and it is urgent to take whatever measures are possible to counteract them."

Nor was a German press report less realistic:

"One stared and stared as if one had lost the power of one's limbs. The big monsters approached us slowly, hobbling, rolling and rocking, but always advancing. Nothing impeded them. Some one in the front-line trenches shouted: 'the devil is coming' and the word passed along the line like wild fire!"

Indeed, the devil was not only coming—he had come!

September 15, 1943

XL

POLTAVA

POLTAVA, WHICH YESTERDAY WAS REOCCUPIED BY THE RUSSIANS, IS MORE THAN a city and an important rail centre; for above all it is a symbol of victory in every Russian heart.

There, on July 8, 1709, two remarkable men met in clinch to contend for the hegemony of the Baltic lands. They were Charles XII of Sweden and Peter the Great of Russia, and Peter won and out of his victory emerged the Russia which was to be until the coming of Lenin. Hence Poltava has taken its place among the decisive battles of the world.

Charles was born in 1782, and Peter was ten years his senior. The one was extraordinary, heroic and probably the most adventuresome and audacious soldier in history; nevertheless a meteor rather than a star—something brilliant and impermanent. The other was thorough, massive, titanic, cyclonic and gigantic in his moods of life; a founder and a builder and, therefore, utterly different when compared to his great adversary.

In February, 1700—one year before the War of the Spanish Succession convulsed Western Europe—the Great Northern War was launched by Poland, Denmark and Russia against Sweden, whose territories then included half of present day Latvia, Estonia and Finland, as well as the region around modern Leningrad. Thereupon Charles, a boy of eighteen, astonished the Swedish Senate by declaring: "I have resolved never to begin an unrighteous war; but I have also resolved never to finish a righteous war till I have utterly crushed my enemies." On April 20 he set out from Stockholm to astonish Europe.

In November, at the head of 8,000 men, he routed 80,000 Russians in the great battle of Narva. Next, he turned on Poland and by 1707 had risen to such a position of dominance in Central Europe that nothing remained to prevent him marching his victorious army against Peter. It consisted of 24,000 superb cavalry and 20,000 of the best infantry in the world.

In January, 1708, he advanced on Grodno, took that city and came up with Peter in the neighbourhood of Vilna. The Russians falling back, Charles next moved on Minsk, resolving to take Moscow and so settle the campaign at one blow. Guessing that his adversary would march by way of Smolensk, Peter entrenched the line of the Dnieper, but in July he was outmanœuvred at Holowczyn and routed. Thereupon he fell back devastating the country as he retired, until at last "the Swedes had nothing but a charred wilderness beneath their feet . . . while sometimes the air was so full of smoke that they could not see the sun."

Refusing to abandon the campaign, Charles turned southwards to link up with Mazeppa, Hetman of the Ukrainian Cossacks, at the time in rebellion against Peter. He hoped to obtain from him 30,000 Cossacks, but, when in November he joined him, he found the rebellion had been so completely crushed that all that was left to Mazeppa were some 1,500.

In order to supply his army Charles pushed on to be overwhelmed by the winter which that year was one of the severest ever experienced. Even the swift river Rhone in France was covered with ice, as were the canals in Venice and the estuary of the Tagus. In the Ukraine birds dropped dead from the trees and spirits froze solid in their casks. Nevertheless, Charles pushed on until his army was reduced from 41,000 to 22,000.

His position now was an extraordinary one: his communications with Central Europe were cut; his nearest reinforcements were 900 miles away, his army was in rags; his artillery mostly abandoned; his powder deteriorated through frequent wettings, and before him lay 80,000 Russians. Nevertheless, he decided to lay siege to Poltava, force his enemy to battle, and then march on Moscow from the south.

On May 12 the siege was opened, and a month later Peter joined his army which was separated from the Swedes by the river Vorshka. Yet so extraordinary was Charles's reputation that he feared to attack him. Thus things stood until on June 28, when the greatest of misfortunes suddenly paralyzed the Swedes. It was Charles's twenty-seventh birthday, and whilst inspecting his outposts, a Cossack armed with a long gun, probably a rifle—for we are told it carried 500 paces—aimed at him and hit him in the foot. So severe did the wound prove to be that he could neither walk nor ride, and was, therefore, unable to command in person.

Directly Peter heard of this misfortune he plucked up courage, crossed the Vorshka, and threw his army into an entrenched camp a little to the north of Poltava. Whereupon, on July 7, Charles, still unable to assume command, sent for his Chancellor, Piper, Field Marshal Rehnskjöld and his leading generals and with them decided to fight a battle on the following day.

Charles being incapacitated, and his generals at loggerheads, the plan of attack was hastily and carelessly prepared. Hitherto in all his battles Charles had decided everything himself, and everyone had relied on him. Now his

generals had to rely on each other and they failed to do so. In fact, the army was without a head.

Rehnskjöld, acting for Charles—who throughout the battle was carried in a litter—broke camp at midnight and formed his army parallel to a line of Russian redoubts; the bulk of the infantry in the centre, the cavalry on either wing, and a strong advanced guard under Generals Sparre and Roos thrown forward. Thus 13,000 Swedes faced 80,000 Russians strongly entrenched. On the part of the Swedes it was to be a battle of cold steel, for the greater part of Charles's infantry had neither powder nor ball.

The battle opened by Sparre capturing the Russian batteries facing the Swedish left, and, had Roos supported him, the probabilities are that those on the right would also have been carried. Had this happened, all the captured Russian cannon could have been turned on to the northern face of Peter's entrenched camp, and under cover of their fire the Swedish infantry could have assaulted it with pike and bayonet.

By some error, seemingly on the part of Piper, instead of Roos being ordered forward, the whole of the Swedish left wing cavalry was sent to support Sparre and to charge the Russian cavalry in rear of the batteries. This left Roos completely in the air. Whereupon Peter, perceiving the blunder, ordered forward General Menshikov and 10,000 men to cut Roos off. This he did and Roos surrendered.

Meanwhile the Swedish infantry, under General Lewenhaupt, advanced and were about to storm the Russian camp, when an order was received to halt. Who gave it is unknown, and though, when Charles on his litter came up, he at once ordered the infantry forward, the favourable moment had been missed, for in the pause Peter had brought forward 40,000 men and 100 guns to face Lewenhaupt's 4,000. Nevertheless the Swedes charged, half to be shot down and half to disappear into the Russian mass to be engulfed and overwhelmed.

By noon the battle was over, and Peter was so overjoyed by his victory that, instead of pressing the pursuit, with his captive Swedish generals he sat down to dinner, and, as the cannon thundered a victorious salute, he raised his glass and proposed a toast to the health of his "teachers in the art of war." "Who are those teachers?" appropriately asked Field Marshal Rehnskjöld. "You, Messieurs Swedes", replied the Tsar. "And well have the pupils shown their gratitude to their teachers", as appropriately answered the Field Marshal.

At 5 p.m., dinner and toasts over, the pursuit began.

Meanwhile, with banners flying and drums beating, borne on his litter in the midst of his army, Charles quitted Poltava and two days later reached the Dnieper. There Lewenhaupt and 14,000 men were forced to surrender to their enemy; but Charles and some 1500 followers escaped. He was lifted on to an old horse called Brandklepper (run to the fire) which had belonged to his father, and it carried him into Turkey to die in 1718, the same year in which Charles was killed at the siege of Fredriksten—five years older than its master.

At Kiev, whither Peter proceeded after his victory, a solemn thanksgiving was offered in the Church of St. Sophia. Addressing the Tsar and his soldiers, a Russian monk by name Féofan Prokopovitch said: "When our neighbours

hear what has happened, they will say, it was not into a foreign country that the Swedish army and the Swedish power ventured, but rather into some mighty sea! They have fallen in and disappeared, even as lead is swallowed in water!"

Therein lies the secret of Russia's might.

September 24, 1943

XLI

SPOOKOLOGY

IF I MIGHT COIN A WORD, THE SOLDIER IS AN INVETERATE "SPOOKOLOGIST". Give him a rifle and forthwith he invokes the spectre of the musket. Give him a machine gun and without hesitation he conjures forth the phantom of the rifle. "Save and defend us from our ghostly enemies"—as the Prayer Book has it—is no part of his creed, for to misquote Shakespeare, "Ghosts, wandering here and there, troop home to barracks."

It is about time we realized this, and it is long over time that our military correspondents did, because it is they who so largely form popular war opinion. What is the result? When the people are misinformed spookology abounds, for then military "genius" floats, like a hot-air balloon, in an atmosphere of propitiatory acclamations.

This is more particularly true when things are going well. Nevertheless, though it may sometimes be profitable to gamble on bucket shop stocks, it is always foolish to suppose that they are gilt-edged securities.

True, obsolete tactics sometimes succeed, even startlingly so. Yet that is no proof of their soundness, for more often than not the secret of their success is to be discovered in the superior stupidity of the enemy. Be it also remembered that success is ever the enemy of originality and that disaster is ever its master. To go on repeating successful tactics is like marking time on the thin crust of a bog.

Bearing these observations in mind, now that Italy is more or less out of the war, it would seem an opportune moment wherein to examine where tactically we stand, because so far the bulk of our experience has been gained against masses of Italians, supported by comparatively small numbers of Germans. And it cannot be doubted that the latter were frequently hamstrung by their allies—surely the worst soldiers that have ever been.

To begin with General Wavell's initial campaign. His remarkable success was not due to numbers or to hitting power, instead to four clearly apparent causes: (1) Surprise; (2) a small number of superior tanks; (3) the total lack of generalship on the part of Marshal Graziani; and (4) the immeasurable superiority of the British soldier over the Italian.

In the campaigns which followed during 1941 and the first half of 1942, the boot was as often as not on the other foot. Rommel's generalship was superior to our own; so for a time were his tanks and their repair organization; besides, Jerry as a fighter was a match for Thomas Atkins.

From February, 1941, to July, 1942, tactics became steadily more and more stereotyped—more fixed—and they remained so until the swift outflanking

movement on which they depended petered out in the Qattara defile. Thenceforth Rommel invented nothing new nor did his opponent—General Montgomery. Nevertheless, at the battle of El Alamein, strange to say, Montgomery—an exceedingly cautious soldier—surprised Rommel, not by novel tactics, but by a return to the tactics of 1917.

This, however, was justified by success, even as much so as Hannibal's tactics were at Cannæ. What, however, was the secret of the great Carthaginian's victory? Not his genius—great though it was—but instead Varro's stupidity. Once the Roman flanking cavalry were defeated, Varro should have fallen back. Instead he attacked. Had he retired, Hannibal's superb manœuvre would have misfired. Also at El Alamein, once the British artillery barrage opened, had Rommel fallen back instead of awaiting assault, Montgomery's attack would have landed in the air.

It would appear that from El Alamein onwards Montgomery has never varied his tactics. That they have succeeded is true—but why? I think the answer is that from El Alamein to Messina British matériel was so superior to German, and British personnel to Italian that they could not have failed to succeed. Though, in the circumstances, this justified their employment, it does not follow that they are gilt-edged stock.

In part, at least, this is corroborated by the Sicilian campaign. During it more than one correspondent questioned the value of El Alamein bombardments. In a series of instructive articles which recently appeared in *The Daily Telegraph*, Christopher Buckley pointed out that these hammer blows impeded forward movement, and directly they fell on the enemy he withdraw. Therefore all that happened was that a few hundred yards of pulverized ground were gained. His remark, "The military benefit of presenting ourselves with ruined villages is open to question", is identical to remarks indulged in by myself and others in 1916-17.

Then the answer suggested was the tank, and, at the battle of Cambrai, this answer proved correct. Now, apparently, it is no longer so; therefore, once again, we should ask—why?

Christopher Buckley's reply is that our army has become road-bound-He writes:

"That is always the danger any modern mechanised army must face. A road-bound pursuing force dependent on motor transport for its supply is liable to be slow in the face of demolitions the enemy has left in his path . . . We must therefore evolve non-mechanised, or rather semi-mechanised light forces capable of making their way round demolitions . . . There is hardly a road crater I have seen in the last nine months that could not have been negotiated without difficulty by an infantryman on a bicycle."

Though I am in no way opposed to the creation of properly organized light infantry—in fact, for nearly forty years now I have advocated them—I would like to point out that the true reason why our armoured forces are road-bound is not that they are over but under mechanized. To-day they are mainly composed of fighting machines on tracks, which can move across country, and of supply vehicles on wheels, which cannot. Therefore, surely

¹See footnote, p. 16.

the solution is to put the supply vehicles on tracks—a solution so obvious

that apparently it is not seen.

This was what we did in 1918, for in the Tank Corps of that period, besides fighting tanks we had supply tanks and cross-country infantry transporters, and though mobility-miles per hour-was nothing like what it is to-day, "locomobility"—ability to move across country—was out of all comparison greater. Ergo, if our spookologists must gaze backwards, why not look back on the tank organization as it was in 1918, instead of on the wasteful artillery bombardments of the preceding year.

Of course it is true that an infantryman on a bicycle can negotiate a crumped road. But once again, as the fashion is to emulate Lot's wife, why not turn On the August 8 that year the roads in places were terribly back to 1918. cratered. How did we pass our 17th Armoured Car Battalion over them?

I will quote from my Tanks in the Great War:

"Although only one day was available wherein to find a solution to this difficulty, it was accomplished by attaching a small force of tanks to the battalion. These tanks were used to tow the armoured cars over the obstacles, or rather along the tracks the tanks formed through them. This

solution proved eminently successful".

Finally, we are told that the future of the tank is not in the assault but in the pursuit. This again is a question of tactics. I have in mind a method of assault which so far has not been tried out. Other methods probably exist in other minds, for the inventiveness of man would seem to be unlimited. But as our spookologists, drilled on the crumped areas of 1917, would never accept them, it would be giving our enemy something for nothing to describe any one of them here.

In 1898 I was taught Waterloo tactics. Fortunately they were so completely obsolete that a little over a year later, when in South Africa, the whiz of the

first Boer bullet knocked them out of my head.

What a pity some of our Generals are not ten years older, for all said and done the South African War was a cross-country affair. There were no roads and but three railways, and the area we operated over was 500,000 square miles in extent: as big as the France, Germany and Italy of that day rolled into one.

Had we depended on artillery barrages, we might still be at war with brother Boer. Fortunately he unspooked us; yet unfortunately ten years too early, for in 1900 most of our Generals of to-day were playing at marbles. And now not a few are playing at cannon balls—indeed spookology needs its Freud.

October, 8, 1943

XLII

GERMANY ON THE DEFENSIVE

TO START A WAR ON THE DEFENSIVE IS ONE THING: TO END IT VICTORIOUSLY ON that same note is quite another. The second of these problems now faces Germany. Can she solve it? Before I hazard an answer to this question I will turn to its background.

Since the war of the Spanish Succession (1701-1713), during which the genius of Marlborough fashioned us into the leading sea power, our strategical advantage over other nations has been that on the outbreak of war we were unattackable. This strong defence has enabled us:

(1) To build up our fighting strength during war time.

(2) To prolong a war until our enemy either collapsed or capitulated.

(3) To withdraw from a war without risking decisive defeat.

The sole extraneous need in our strategy was an ally who could provide us with a continental bridgehead. And because our one war aim until 1914 was the maintenance of the balance of power, our peace policy always favoured the second strongest nation, and the principle underlying our war policy was never to weaken our enemy—the strongest—to such an extent that the balance of power would permanently be upset.

Throughout, our strategy was defensive, because its aim was to defend the balance of power, and it was only possible because of our geographical position coupled with our command of the sea. These enabled us to enter a war on an invulnerable basis, and, when we saw fit, to terminate it on that same footing

-that is, by withdrawing into our unattackable island.

Since 1713 no continental nation has been or could have been so favourably placed; for although it is possible for any one continental nation successfully to wage against another a strategically defensive war, it is not possible for either a single continental nation or a coalition of such nations to do so when we are counted among its enemies and are determined to see the war through.

This was clearly proved during the Napoleonic Wars and again in the First World War; for these conflicts conclusively showed that our enemy's major

problem was how to overcome our insular invulnerability.

In both there were but two possible means of driving us out of the war:

(1) By invasion, or its corollary—blockade.

(2) By stalemate leading to war weariness and a peace on the lines of the Treaty of Utrecht in 1713.

Whereas the second of these alternatives demands a long war, the first demands a short, because the most propitious moment to invade us is as soon as possible after war has been declared, for then, without exception, we have been unprepared.

This being so, and granted that from 1933 onwards Hitler determined to establish a hegemony over Europe, seeing that he cannot have wanted a long war, it is strange that he did not more fully prepare to carry out the first alternative.

A possible explanation is that he relied on gaining his end by military threat rather than by military action, much on the lines adopted by Frederick William I—father of Frederick the Great. But that, once conscription was reintroduced, as it was in 1938, the impetus of the military machine swept him out of the diplomatic and into the war channel whilst still unprepared to solve the major problem.

Another reason may be that the German General Staff either did not expect us to enter the war they were preparing to wage on Napoleonic lines, or, what is more probable, that they failed to see that, should we do so, their major problem must be, not the conquest of Europe, but instead the successful invasion of England.

Should this be correct, then, though that Staff was saturated with Napoleonic lore, it missed the dominant lesson of 1793-1815—namely, that a continental power cannot completely wrest the initiative from an island power except by successful invasion.

When the opportunity presented itself, as it did in June 1940, the Wehrmacht was in no way prepared to invade us, and in spite of the fact that 1,000 additional fighter aircraft and 2,000 special landing craft would in all probability have secured for it an effective footing on our southern shores.

As it happened, reliance on bombing led to a complete fiasco, and what was the upshot? That from September, 1940, onwards, in spite of her tactical offensives, Germany was more and more drawn towards alternative two. Faced by a long war, for which she was not fully prepared, the cornfields of the Ukraine, and possibly also the oilfields of Caucasia, became vital to its sustenance. This meant war with Russia.

So long as we could be kept out of Europe—that is, deprived of a bridge-head—war against the Soviets could be pressed offensively. But directly it became apparent, as it must have soon after the battle of El Alamein, that the likelihood was that we and the Americans would gain such a footing in Europe, the sole sane course open to Germany was, in whole or in part, to pull out of Russia, and that as rapidly as possible. Not only to shorten her immense front, but above all to contract the lines of communication leading to it, because they absorbed more man power than the front itself.

Strategically this was imperative in order to build up a powerful central reserve, sufficiently close to the Russian front and to the as yet problematical

Second Fronts to reinforce either at short notice.

Should this reasoning be correct, then it is clear why the German General Staff has been compelled to switch from Napoleonic to Frederician warfare—that is, from the tactical offensive to the strategical defensive.

In brief, here is the earlier story:

In 1756 Prussia—then a comparatively small state—was faced by Austria, France, Russia, Sweden and Saxony in coalition, and compelled to fight a war on several fronts against numerically superior forces. Nevertheless, for five years Frederick held his own. In 1761, however, his defeat seemed imminent. That year he could muster no more than 60,000 men, and England threatened to withdraw her subsidies, when suddenly the wheel of fortune turned in his favour. On January 5, 1762, the Tzarina Elizabeth died. Whereupon her successor, Peter III, offered peace to Frederick.

The withdrawal of Russia forthwith led to the withdrawal of Sweden, leaving France and Austria alone in the field. As the one was bled white and the other was paralytic, it came about that an armistice was agreed upon. This led to the signing of the Peace of Hubertusberg on February 15, 1763, by which the status quo ante was re-established. Thus, at the eleventh hour, Frederick was saved by the death of a woman.

Can Hitler and his Staff hope to be so fortunate? Should another Peter III or a simulacrum of him arise, the answer is a possible though far from a probable "yes". For not only are present circumstances very different from those of the Seven Years' War; but thus far, though the German High Command has shown itself to be an apt pupil of Napoleon, it has not displayed the innate military wisdom of Frederick.

"He undertook nothing beyond his power", wrote Clausewitz, "and just enough to gain his object." Further:

"At the head of a small State, which was like other States in most things, and only ahead of them in some branches of administration, he could not be an Alexander, and, as Charles XII, he would only, like him, have broken his head. We find, therefore, in the whole of his conduct of the War, a controlled power, always well balanced, and never wanting in energy, which in the most critical moments rises to astonishing deeds, and the next moment oscillates quietly on again in subordination to the play of the most subtle political influences. Neither vanity, thirst for glory; nor vengeance could make him deviate from his course, and this course alone it is which brought him to a fortunate termination of the contest."

Though, certainly, the Germans have shown energy beyond question, and also astonishing daring at critical moments, thus far in the war the remaining virtues of their greatest soldier have been conspicuous only through their absence. That they will now develop them is, therefore, unlikely. Consequently the end looks more like a second St. Helena than a duplication of Hubertusberg.

Nevertheless, Fortune is a fickle jade, and in war, more especially a long war, there is no betting on certainties.

October 18, 1943

XLIII

THE STRATEGY OF THE SECOND FRONT

THE SECOND FRONT IS NO NEW PROBLEM IN OUR HISTORY, FOR SINCE WE BECAME the dominant sea power it has cropped up in each great war we have been engaged in.

The reason is self-evident. It is that we are surrounded by the sea, which strategically possesses two characteristics: it is both an obstacle and a medium of movement. Armies cannot cross it except in ships; therefore the size of the forces to be transported must be measured by the shipping tonnage available.

It is because of this limitation that, during the last 900 years, we have only once been successfully invaded—namely, in 1066—and then, had it not been for the establishment of a second front in the north of England by the forces of Earl Tostig and Harald Hardrada, the probability is that William of Normandy would not have effected a successful landing at Pevensey.

Unnoticed though it may have been, William's strategy was the pattern we followed in all our European wars of the eighteenth and nineteenth centuries, but with this variation: Whereas William's invading forces were represented by those of a continental ally moving by land instead of by water, we played the part of Tostig and Hardrada.

Normally our object was not to engage in the main campaign, but instead to divert and to distract by means of a secondary operation, the aim of which was to compel the enemy to look in two directions and divide his forces.

Thus, in the War of the Spanish Succession (1701-1713), though we engaged a considerable army in the main campaign fought in the Netherlands and Germany, we opened also a secondary front in Spain.

In the Seven Years' War (1756-1763) we subsidised Prussia in the main theatre of war, and much to our profit established secondary fronts against

France in Canada and India.

In the French Revolutionary and Napoleonic Wars (1793-1815), though we set out to support Austria in Flanders and to open some kind of secondary front at Toulon and in Corsica, it was not until the Battle of Trafalgar in 1805 gave us the sea supremacy we needed in order to open a true second front, that such a front was opened in Spain.

During these hundred and odd years, the sole occasion upon which we failed to follow this strategy was in the war of the American Rebellion (1775-1783). We went to war with the American colonists without a single friend to support us in Europe. The upshot was that our first major disaster—the surrender of Burgoyne's army at Saratoga, on October 17, 1776—brought France into the war on the enemy's side, next Spain declared war on us and then Holland—all naval powers.

Further, Russia, Prussia, the Empire, Portugal, Turkey and the Kingdom of Naples proclaimed an Armed Neutrality against us, the object of which was to protect neutral ships from molestation on the high seas and to recognise

only effective blockades.

Thus was established the first great combined attack on our sea power, and together with the resistance of the colonists it drove us out of the war.

Omitting the War in the Crimea, in which our Baltic operations, vis-à-vis the siege of Sebastopol, were too limited even to be considered as a secondary operation, in our next great war, that of 1914-1918, we swapped our traditional strategy for one of the continental type. From the first we supported the main front in strength, immediately to be confronted by a hostile secondary front in Asia Minor.

The reason for this strategical volte face was that, from the opening of the conflict, the Central Powers were faced by a major war on two fronts—one in the East and one in the West—and so little was known of the potentials of modern warfare that the Allied Powers were obsessed by the belief that their

enemies would be pinched out of existence within a few months.

When this happy expectation proved erroneous, the question of establishing a second front—that is, a front of secondary importance when compared to the main fronts—at once cropped up; but this time with the intention of opening a supply route to Russia, rather than of distracting our enemies. The outcrop was the abortive Dardanelles campaign, which resulted in weakening the Western Front and in depressing the Eastern.

My own opinion is—knowing as we did quite early in 1915 the probabilities were that Italy would join the Allied Powers, actually she did so on April 26, 1915, one day after our initial landing in the Gallipoli peninsula—that the secondary front should have been established in Italy, because an unopposed landing would have been assured; the co-operation of extensive allied land forces gained, and the sea route shortened by 1000 miles. Further still, Austria and not the Balkans was the Achilles' heel of Germany.

Strange to relate, through a chapter of accidents we find ourselves in Italy

to-day: is Italy then the second front? Before attempting to answer this question I will glance back on the chapter.

Setting out in 1939 on strategical premises far more faulty than those we based our plans on in 1914 (it is difficult even to imagine what they were, outside a stalemate leading to Germany's economic collapse) in June, 1940, we lost our footing on the continent and thence onwards for exactly a year the security of our home front absorbed all our energies.

Not until Germany attacked Russia did the question of a second front arise, and for the simple reason that until then no Allied first front existed. Then, in August, 1941, it emerged in print, not as a strategical conception but as a political slogan.

However desirous our Government may have been to assist their new ally, until America was forced into the war it was totally impossible to do so. Further, it would have remained impossible without the belligerent support of America and in spite of Mr. Churchill's declaration of February 9, 1941: "We do not need the gallant armies which are forming throughout the American Union. We do not need them this year, nor next year, nor any year that I can foresee. But we do need most urgently the immense and continuous supply of war materials and technical apparatus of all kinds . . . Give us the tools and we will finish the job."

Even after America came in, no true second front to the Russian main front could with any likelihood of success have been established until we and the Americans had (1) won supremacy in the air; (2) raised, trained and equipped most powerful striking forces; (3) mastered the U-boat in the Atlantic and (4) built sufficient shipping to maintain a vast army and air force overseas.

Added to these—more so so far as we ourselves were concerned—it was of vital importance to reopen the Mediterranean. This meant the occupation of Tunisia and Sicily. That reopening, effected in August last, was in its way a second Trafalgar.

I return now to the question: Does our invasion of Italy represent a true Second Front?

The answer depends on the Allied political object. Were it to force Germany out of the war on terms, say, a return to the status quo of 1939 or of some previous year, my answer would be "yes". But as this is not the object, for instead, it is the annihilation of Germany as a great power, my answer is "no".

My reason is that, from the strategical point of view, we have now got the whole war upside down. Until Sicily was invaded and the Mediterranean reopened, it was evident that the primary front lay in Russia, and that so far no true secondary front had been established. That invasion, however, made clear one supremely important tactical point, which was that, given mastery of the air, an opposed landing is vastly facilitated.

Meanwhile, the persistent Russian demand for the opening of the second front made clear another point—the ever-increasing exhaustion of Russia.

A further point is that the military and economic potentials of America and the British Empire are to-day superior to those of Russia and are steadily increasing. Therefore, in order to ease Russia's situation, the simplest and most practical thing to do is first to place the Russian operations on a Second

Front footing, and, secondly, with the all but untouched Anglo-American

forces to open a new first front in the West.

It needs but little imagination to see that the locality where this can most profitably be done is where the original Allied front stood—in Northern France. If only because it is there and nowhere else that Anglo-American strength can be developed in maximum.

The reasons are that no locality in Western Europe can even approximately rival Great Britain as a base for decisive operations, because:

- (1) It is the main European supply depot of the Allied Powers.
- (2) It is within the shortest sea-haul of the Continent.
- (3) From it air power can be developed in maximum to cover and support an invasion.

To-day, because our political aim is all but identical to William the Conqueror's—the conquest of a foreign land and not merely the submission of our enemy on terms, as was our policy in the eighteenth century—we must play in reverse the part he played at Hastings, leaving it to the Russians to emulate the activities of Tostig and Hardrada on the most helpful of all possible second fronts.

October 29, 1943

XLIV

BULLET-PROOF KANGAROOS

FEW CONSECUTIVE CAMPAIGNS HAVE DISPLAYED SO GREAT A CONTRAST AS THE one which gave us North Africa and its off-spring—our present adventure in Italy. The leading characteristic of the first was speed; thus far, in General

Alexander's words, that of the second has been "slow slogging";

The first began at El Alamein on October 23, 1942, and, on May 12, following, ended at Cape Bon. It resulted in the occupation of the whole of North Africa from a little west of Alexandria to Casablanca. From start to finish it numbered 201 days for the Eighth Army, and 185 for the First. The one covered 1700 miles and the other approximately 400 from Algiers to Tunis. Their average speeds were, respectively, a little over eight and a little under two miles the day.

The second campaign opened on July 10 with the invasion of Sicily, and, on 17th August, all resistance in that island ended. On September 3 Reggio, on the Italian mainland, was occupied by the Eighth Army, and six days later the Fifth Army forced a landing at Salerno. Since this latter date and up to the end of October the Eighth Army has advanced 250 miles north of the heel of Italy, and the Fifth about 50 miles north of Salerno. Therefore the average speeds of advance have been for the one less than five miles the day, and for the other approximately one.

When comparing these rates of movement, it is only fair to point out that,

thus far, the Fifth Army has done the bulk of the fighting.

In North Africa the most spectacular advances were made in the first lap of the pursuit—that is, from El Alamein to Jedabia. The average speed was

over 32 miles the day, and the distance covered was 650 miles, or as far as Reggio is from Milan.

When comparing these two campaigns, the main reason for these variations in speed is self-evident. Whereas the one was a flat race, the other is a steeple-chase, because topographically the two theatres of war are very different. Whereas three-quarters of the area operated over in North Africa were level desert land, except for the coastal plains the whole leg of Italy is mountainous. Yet against this must be set the difficulties of supply. Though in Italy communications are normal, in Africa they are largely non-existent and water is frequently difficult to obtain. Therefore, from the logistical (marching and supplying) point of view, conditions were so different that a comparison of the two campaigns is of little profit.

Nevertheless, there is another side to the problem of speed, which will repay careful study; it is the influence of politics on strategical and tactical movements.

In North Africa, Generals Alexander and Montgomery faced a purely military task. It was to break through a defended front, pursue a beaten enemy, and—most difficult of all—feed and supply the pursuit. Once Rommel was on the run, supplying, far more so than fighting, occupied these generals and their staffs. Further, their problem was more complex than Rommel's: whereas he fell back on his depots, every day of the pursuit carried the Eighth Army forward of theirs.

But when we turn to the second half of this campaign and look at the problem which faced Generals Eisenhower and Anderson, we find a marked difference. It is political as well as military, for it entailed the invasion of a non-belligerent country.

The question was: Would or would not the French oppose a landing? Had they done so—as we now know—the probabilities are that the operation would have failed. The sole means of overcoming this danger was to resort to political action. Thus it came about that Admiral Darlan was bought ou or won over. It was a fine piece of politico-military work; for, whatever we may think of Darlan as a man, his declaration of neutrality saved the situation.

Successful though political action was, strategical action was lamentably timid. There is no question now, and there could have been none at the time, that the true strategical goal was Bizerta, and had Bizerta been occupied on November 8 or during the following week, by a small combined force, the whole campaign would have been shortened by several months. Why it was not, we have been told, was because it was considered too risky. Whoever decided the question on that issue committed the unpardonable offence in war of subordinating strategy to underwriters' considerations.

Let us now turn to the second campaign.

So far as one can read between the lines of official reports and parliamentary speeches, as originally planned, the attack on Sicily was a limited operation—namely, the occupation of that island and nothing more. It was a highly audacious undertaking, and had the Italians put up half the fight the Germans did, it is doubtful whether it would have succeeded. As things turned out they did not fight at all; nevertheless, the two and a half German divisions who did, held on to the island until August 17.

Meanwhile an event of the highest political importance took place. On July 25 Mussolini fell. This meant that Italy was virtually out of the war. Whereupon—so it would appear—it was decided to extend the campaign to the Italian mainland. If so, then the one essential was speedy political action. For, if Italy was to be invaded, the first step was to make sure of Italian neutrality, if not of co-operation.

This could have been done by offering a surrender on terms, even if identical to those eventually accepted. But no, it seems we were throttled by the slogan of "unconditional surrender". The upshot was forty days' palavering to end in Badoglio accepting terms he would have swallowed all along.

This political situation reveals a hitherto unnoticed point: the complete Anglo-American misunderstanding of German warfare. It is profoundly Napoleonic. "Energy, energy, speed!" was the war cry of Bonaparte. Mass multiplied by speed doubles striking power. Speed makes good lack of numbers. "Aptitude for war is aptitude for movement", said Bonaparte. And this is what his soldiers said: "The little Corporal has discovered a new method of making war; he makes more use of our legs than of our bayonets."

Rapidity is the essential and primordial factor in German warfare. To give the Germans four days is to run a risk, to give them 40 is to present them with a campaign—they beat France in less time. This is what General Alexander has recently said: "Had not he [the Germans] been so quick we might have occupied Italy without a fight." "So quick!" and in the fifth year of blitzkrieg. Mars, indeed, needs a handkerchief or two . . . dozen!

After July 25, if Italy were to be invaded, it was not a question of another opposed landing but of a pursuit, such as followed El Alamein. Italy had cracked up from Cape Spartivento to the Alps, far more completely than the Afrika Korps on November 2. Therefore, had we, say, on August 8—that is, 14 days after the fall of Mussolini—occupied Corsica and simultaneously landed a force about Spezia and Leghorn and marched on the Etruscan Apennines, we should have cut the leg of Italy off at the hip, whilst the Germans were still disarming the Milanese. As the leg is 550 miles long, had this operation, let us suppose, taken eight days, it would have been equivalent to an advance from Reggio northwards at an average speed of 68 miles per diem—twice Montgomery's best!

Were this impossible, then it may be asked: Was it wise to invade Italy at all? On June 8 last, Mr. Churchill said: "To have the initiative is an immense advantage. At the same time it is a heavy and exacting responsibility. Left to itself opportunity may easily lead to divergency."

It would seem that it has—a tactical divergency this time.

As no general of his own free choice would fight his way across a formidable range of mountains, would any general be so mad as to start at one end of a range 550 miles long and switch-back his way to the other end? Think this problem out—you strategists:

Should you start from Reggio to march to Bologna, as every river, stream, ravine and spur springing from the Apennines will run at right angles to your path, should each in turn be held by the enemy, how long do you expect it would take you to reach your destination?

Each ditch has to be stormed—it's fantastic. A 550 miles steeplechase with each fence a river, ridge, or a ravine—it's silly. In such a campaign what use are your tanks, your guns and your men, for what you want is an army of bullet-proof kangaroos.

November 4, 1943

XLV

RIDDLE OF THE BATTLEFIELDS

THOUGH NO SCIENCE IS MORE EXACT THAN MATHEMATICS, MILITARY ARITHMETIC is, normally, inexact in the extreme. Take almost any battle you like and seek an answer to: how many men fought in it? how many were killed, wounded and captured? and at once a score of contradictions arise. So frequent is this, it is indeed strange that, so far as I am aware, no book exists on this branch of the doctrine of numbers.

Its importance is self-evident. For instance, given the correct casualties of a battle, then it is possible to deduce, at least in part, what that battle was like. Given fictitious ones, then, unless the compiler is an astute military mathematician, what he wishes to hide will become apparent.

For example, during the Italo-Abyssinian War, a small yet highly important engagement was fought at Mai Timchet—a ford over the Takkaze river held by an Italian detachment some 1000 strong. On December 15, 1935, this post was driven back at a loss of 272 killed and 29 wounded—a loss of 30 per cent. On this information I sketched out the following story:

The detachment's flanks were turned; it hastily retired; failed to picket the defile in its rear; was caught in it, part surrounded, and had to leave all wounded, except 29, behind; whereupon they were massacred. In short, the whole affair had been a rout followed by panic.

Later on I met an officer who had taken part in the action. He confirmed my deduction in nearly every detail.

The key to the story was this: the proportion of killed to wounded was abnormal. Therefore, in all such calculations, the first point to fix is the normal ratio between killed and wounded.

Taking military history as a whole, no semblance of exactness can be arrived at, because casualties depend upon weapon power. Yet, generally speaking, one fact is outstanding, it is that, as the range of missiles goes up, casualties go down. Therefore, in order to fix the present ratio, we must examine the casualties of the last war—that is the closest one in weapon power to the present war.

As regards ourselves, between 1914-18 the official percentages to total casualties of fighting arms were: killed and died, 19.94; wounded, 66.29; missing and prisoners, 13.77 or, approximately, 1 man killed to 3.3 wounded to .7 missing and prisoners.

Though, as the present war is mobile instead of static, there are bound to be variations, more particularly so as regards missing and prisoners, I should,

nevertheless, be surprised to learn that the ratio between killed and wounded has radically changed.

As the two main combatant arms are infantry and tanks, it is of interest to note that in the last war, whereas out of every 100 infantry casualties, killed to wounded to missing and prisoners was 19.96 to 65.23 to 14.81, in the Tank Corps it was, 12.58 to 70.24 to 17.18.

The reduction of killed in the Tank Corps was due to armour; the increase in wounded to "splash" (fragments of bullets entering the tank and normally inflicting light wounds) and the increase in missing and prisoners to the fact that, once a tank was put out of action, normally it was more difficult for its crew to escape than had it belonged to an infantry unit.

Though, to-day, "splash" has largely been overcome, the last mentioned difficulty still remains. Therefore, as tanks have increased in numbers, we may expect that the ratio of the missing and prisoners in armoured forces will continue to be higher than in infantry formations.

Few though these percentages are, they, nevertheless, provide us with a yardstick, even if an imperfect one, wherewith to measure the value of casualty reports in the present war.

For instance, some time back I read in a leading morning paper that, according to a reliable report, 200,000 Germans had been killed on a comparatively small sector of the Russian front. If so, then the total casualties in killed and wounded must have been in the neighbourhood of 860,000, and as in a modern battle a 20 per cent. loss may be taken as a maximum, then there must have been no fewer than 4,300,000 German combatants. Further, as under present-day conditions, administrative troops outnumber combatant—in the last war the ratio was 40 per cent. to 60 per cent.—at least another 4,300,000 must be added. Thus, on and in rear of this comparatively small sector we obtain a grand total of 8,600,000 Germans—a fantastic figure!

Recently the Soviet Information Bureau in Moscow published the following German losses for the four months July to October this year—900,000 killed, 1,702,000 wounded and 98,000 prisoners, more than half of whom were wounded, a total of 2,700,000. Let us examine these figures.

In a long-drawn-out campaign in which there is much fighting, an average 10 per cent. monthly loss may be considered high, as it means an annual loss of 120 per cent.—that is, more than a complete turnover. Now Marshal Stalin has told us that the German losses between November, 1942, and October, 1943, were more than 4,000,000 including 1,800,000 killed. Therefore, as the losses during the last four months were 2,700,000, the losses during the previous eight must have been 1,300,000, or slightly over. But as the killed during the last four months numbered 900,000, and as the total killed during the twelve months numbered 1,800,000, then the killed during the eight months must also have numbered 900,000. This means that the maximum (prisoners are not given) German casualties in wounded during the eight months was 400,000. Thus, during these eight months the ratio of 1 killed to 3.3 wounded becomes 2.25 killed to 1 wounded. Evidently, some miscalculation here.

The most interesting figures are, however, those of the 98,000 prisoners. As more than half were wounded, it may be assumed that 48,000 were not.

First, when these 50,000 wounded are added to the 1,702,000 uncaptured wounded, then, out of every 36 wounded Germans, 35 were evacuated. This not only points to a super-super-efficient medical service, but also to a phenomenally methodical retreat.

Secondly, as regards the 48,000 unwounded prisoners, because the campaign was of four months duration, therefore the average daily loss in prisoners was 400. Remembering that during these months not only were the Germans in full retreat, and that in such operations losses in prisoners are generally considerable, but that their withdrawal was on a front averaging some 1400 miles in width, then the daily loss was one prisoner to every three and a half miles of front. A phenomenally low figure for the ferocious fighting reported.

Accepting the above figures as approximately correct, then the sole conclusion I can arrive at is: Firstly, that the abnormally high proportion of killed is only to be explained on one of two accounts; either the Russians are in the habit of systematically massacring their prisoners, or the Germans, rather than be made prisoners, commit *hara-kiri*. If so, then secondly, that, as regards the 1.702,000 wounded, the greater part must be due to self-mutilation.

Therefore, setting aside the possibility of massacre, we are left with the alternative that the Germans are committing suicide in order to avoid being captured as well as mutilating themselves in order to avoid fighting, at the rate of anything between ten and twenty thousand the day. Thus at one and the same time, they are displaying a height of courage and a profundity of cowardice never before recorded in the history of war.

Of course this won't wash. The true answer to all such-like casualty figures, whether Russian, German, Japanese, American or our own is propaganda. Yet, how much more convincing would casualty propaganda be if it were based on the simple rule of 1 to 3.3 instead of 2.25 to 1. And, incidentally, how much more difficult to criticise; for then the riddle of the battlefields would be thoroughly well camouflaged.

November 12, 1943

XLVI

WAR AND THE MACHINE

DURING THE LAST 10,000 YEARS AND MORE, WAR HAS PASSED THROUGH STRANGELY contradictory phases. In the earliest civilization known, that of a purely hunting community, its aim was to extend the hunting-grounds and the method employed was the extermination of the tribe or tribes which occupied them. Later, when an agricultural civilization arose, extermination gave way to capture, so that slaves might be obtained to till the fields.

The social results of this change were radical. Whereas in a hunting community all men are free and equal, therefore of one class, in an agricultural two classes are established—masters and slaves, whether the latter are shackled, bound by feudal laws, or, as Marx says, "bound to his owner by invisible threads," though given "the appearance of independence . . . by means of the perpetual change from one wage lord to another."

Fundamentally, this condition continues to govern society, for though the masses of the workers are, anyhow, in our own country, politically free, they are still economically bound, for in bulk they remain propertyless wage earners. Notwithstanding, since the Industrial Revolution set in, a third class has emerged—namely, the worker for whom there is no work: the unemployed.

The reason for this is to be sought in the machine, the productive power of which, when compared to the slave's—ancient, medieval or modern—has become so immense that, during the last hundred years and more, a surplus of workers over the numbers required to tend the machines and grow the food the community consumes has steadily risen. Whereas in the bee-hive the workers are many and the drones few, in an advancing industrial civilization the reverse is the case, the "lazy yawning drone", as Shakespeare has it, ever increasing in numbers.

The most startling confirmation of this is to be found in the present war and among all belligerent nations. Among ourselves, out of a population of some 46,000,000, excluding children below the age of sixteen and adults over sixty-five, of the remainder—the fighting and working categories—probably more than half is employed in the fighting services or on war work of one kind or another. From the point of view of peace production, not only virtually but actually this means that they are unemployed. Nevertheless, as statistics show, the people as a whole have never before been so adequately fed, housed and probably also clothed.

As this is so, what is going to happen when peace returns? True, the renewed production of luxuries will absorb a certain number of war workers, so will a return to waste and to foreign trade. Yet to suppose that, so long as accepted economics remain what they are, all the war workers will be absorbed at any period following the war, suggests the ridiculous. If they were, the glut of production would be so enormous that the goods produced could not be consumed. Coincidental to this the competition between the nations would grow so violent that a third world war would become a certainty. For war is the sole corrector of over-production in an economy governed by under-consumption.

We experienced this after the last war, but once the present conflict ends the crisis will be more violent, because the social and economic upheavals have been more intense.

In 1919 and the years following, three palliatives were tried out: (1) The dole system; (2) the subsidizing of non-production and the destruction of things produced, and (3) in Germany, the return to conscription. Be it not overlooked, and this is a very important point, conscription and its correlative, the establishment of war industries in peace time, are the least demoralizing means of reducing unemployment.

Will these palliatives be experimented with again? As regards the first, the answer is probably "yes"—that is to say, in those countries in which money still possesses purchasing power. Assuming our enemies' total defeat, as this is unlikely in their countries, and as in greater part their industries will have been destroyed, for the time being at least it would seem probable that the second will be unnecessary, as it can be obviated by two means; either by stocking and reconstructing the defeated countries at the expense of their victors, or by compelling the vanquished to accept gigantic loans wherewith to

purchase the materials necessary to do so themselves. Though either of these means will assist in the temporary reduction of unemployment, it is obvious that a time must come when their effectiveness will cease. That time is when reconstruction is completed.

The third palliative—conscription—will almost certainly be denied the defeated nations, and with equal certainty will be maintained, so long as it is possible, by the victors in the form of the military occupation of the ex-enemy countries: (1) To enforce the terms of the dictated peace, and (2) to mitigate

unemployment at home.

Nevertheless, two important items must not be overlooked. The first is, will the victors' soldiers and people tolerate an occupation of many years? And the second—until the ex-enemy countries have been reinstated, the cost of the occupation will fall on the victors. If not, then those countries will have to accept further loans, until their financial position becomes so intolerable that repudiation will eventually be sought through war or revolution.

Should this argument be logical, then it is obvious that none of these three palliatives can effect a cure. In turn, they all lead to war in one form or another. The first to class war. The second to war against reason, for in a world eager to consume, it is madness to destroy what is wanted or to subsidize non-production. The third to foreign war. Other means must, therefore, be sought, and, personally, I can suggest but two.

The first is to return to the barbaric form of war as practised by hunting communities—that is, to clear the enemy's industrial hunting-grounds of their inhabitants: to liquidate them. This solution was actually suggested by the late Mr. Morley Roberts in his book *The Behaviour of Nations*. In it he wrote: "But if the Germans are again overcome it must be held that the massacre of a whole population is justifiable if no other means can secure an inoffensive nation or nationality."

As anyone of the three palliatives will most certainly fail to tame the Germans—rather will they render them more ferocious—then, according to this pseudoscientist, massacre is the sole solution. Once effected, room will be found for some 40,000,000 of the victors' unemployed, and the problem will be solved for at least a generation.

The second solution is for the victors to agree to reduce the hours of work of their working populations, to control prices and to increase the wages and salaries of all consumers. Next, to impose this policy on their ex-enemies, with certain qualifications regarding the hours of work required for reconstruction. Consumption will then catch up with production, and this, in a roundabout way, is what is actually happening in the war: all that is produced is consumed—marketable goods in our homes and non-marketable on the battle-fields.

Here, then, is the real crux in our industrial civilization: As wars cannot continue for ever and as in peace time more can be produced in an eight hours' day than can be consumed, the logical answer would, therefore, seem to be: first to provide the people with increased purchasing power, and secondly, when consumption is saturated, to cut down the hours of work, and so give the workers leisure wherein to enjoy their earnings. Never let it escape us that work is but the means to an end—namely, the enjoyment of life. And, if

both victors and vanquished can live joyous lives, what economic cause will there then be left to fight about?

Thus, then, whispers the machine to all who choose to hear:

"I am the child of your intelligence, and the servant of your needs. I and I alone can once and for all solve the problem of your slavery by whittling down the hours of your labour until the curse of Eden is revoked. This I can do if you will but cease worshipping me, and instead recognise in me the master slave of all.

"Possessing neither mind, nor heart, nor flesh, I cannot complain. But continue to believe in me as your god and master—I, a thing of iron fashioned by your hands—then, to expunge this idolatry, I will grind you in the dust of battlefield after battlefield and drench you in the blood of revolution after revolution until you, a thing of intelligence, learn wisdom."

"Choose, then, between War or Peace; for in my senseless, soulless frame

are locked the secrets of hell and of heaven upon earth."

November 19, 1943

XLVII

HUITZILOPOCHTLI

WARS COME AND WARS GO, AND AFTER EACH BLOODY CONFLICT MAN EXCLAIMS "Never again!" As well command the inflowing tide to halt or the lowering thunder cloud to dissolve; for back marches war, and each time more horribly panoplied.

Is war, then, inevitable? No man can begin rightly to answer this question until he troubles to diagnose its causes; for, like bodily diseases, peace has its microbes, and until they are discovered, no wordy incantation can restrict the ravages of war, let alone eliminate war itself. Neither can force.

When, with discrimination, we examine history, clearly we see that therehave always been two fundamental causes of war, the one economic and the otherpsychological, and in this article I intend to make the second my subject.

What, then, is the psychological cause of war? I will leave it to a Darwin-ian—Mr. Alfred Machin—to answer this question. He writes: "... men have a deep-lying innate hatred of one another... It is evidence of the original state of man [as animal]. The grown-up males of all carnivores live in a state of latent hostility, one to another... They are naturally rivals of one another, a rivalry which in the breeding season turns to the direct law of battle."

In different words, St. James, in his day, said much the same thing: "From whence come wars and fightings among you? come they not hence, even of your lusts that war in your members." In turn, Pascal and Hobbes answered the question in still fewer words. The one said, "men hate one another," and the other—"men were by nature enemies."

Psycho-analysts have for long worked on the theory that the experiences of the childhood of the race, like those of actual childhood, are stored away in the unconscious mind of man, or as a French poet has put it: "Le vieux sang

de la bête est resté dans son corps" (the old blood of the beast has remained in his body). Thus it comes about as Freud has said: "Civilized society is perpetually menaced with disintegration through this primary hostility of men towards one another." Also he has alluded to "the innate tendencies in mankind towards aggression, destruction, and in addition cruelty."

In the circumstances in which man as hunter was placed, and in which he remained for thousands and thousands of years, the destruction of his rivals by the cruellest means possible was essential to his own survival. Thus, less than a century ago, the Redskin—a hunter—was fiendishly cruel, because cruelty stimulated fear in the heart of his potential adversary. Instead of fighting, his enemy might be induced to fly before the terror of his scalping knife. Fear, engendered by cruelty, was the Redskin's moral weapon, and as such, in a hunting community, cruelty possesses a survival value.

This state continued until man took to agriculture, when civilization began to take form, and once men were rooted in their fields, by degrees peace, as much so as war, became essential to the existence of the community. Therefore within the community the crucial problem was how to kennel the beast in man, how to keep it on leash so that communal life might become possible.

How was this problem solved? My answer is, through reliance on spiritual rather than on physical terror; in other words—through religion. When the tribe was threatened from without, the priest unleashed the beast of hate, and, when victory was won, he brought it back to heel by his magic—spiritual terror. But he could not annihilate the beast, for it was part of man's very being. Had he been able to do so, not only would he have rendered religion and with it himself superfluous, but his tribe would have perished; for though hate within its social life had become a death value, as the urge towards communal self-preservation it still retained its survival value.

To prevent sudden outbursts of hate from disrupting the tribe during peace time, and to keep hatred virile for war, the priest transubstantiated the beast into a god and propitiated it by bloody sacrifices. So it came about that by means of his ritual of death he preserved the communal life of his tribe. The priest was always its hidden king, sanctified by unseen and therefore unquestionable authority.

One of the clearest examples of all this is to be found in the purely agricultural civilization of the Aztecs, and, when reading their history, two things at once strike us; they were a maize-growing and a temple-building people. Their occupation was peaceful and their religion was warlike, and though their cultural refinements were amazing, they were, nevertheless, cannibals.

Their tutelary deity was Huitzilopochtli, the god of war and of the sun, whose animal nature needed human blood to sustain its warmth. According to Prescott, when the temples of this god were dedicated in 1486, 70,000 captives were sacrificed on their altars. Bernal Diaz, a follower of Cortés, looked upon Huitzilopochtli and wrote:

"He had a very broad face and monstrous and terrible eyes, and the whole of his body was covered with precious stones, and gold and pearls... All the walls of the oratory were so splashed and encrusted with blood that they were black.... The walls were so clotted with blood and the soil so bathed with it that in the slaughter houses of Spain there is not such another stench."

Military operations were closely interwoven with the Aztec religion. Their main object was not conquest, but instead the collection of sacrificial victims for the altars of Huitzilopochtli. The defeat of the "enemy" was not aimed at, and least of all his extermination, for otherwise Huitzilopochtli and his satellite gods could not be fed. Thus war was ritualistically canalized into non-aggressive channels.

We see, therefore, that among the Aztecs the psychological cause of war was sublimated rather than restricted. Its safety valve was the fear of Huitzilopochtli. As the sole domesticated animal known in Mexico was the dog, human sacrifice provided the people with an occasional free meat meal, Also they helped to solve the over-population problem, which so frequently dominates countries in which cereals grow abundantly.

When we turn to religion generally, we find that throughout history, its higher forms have always arisen in prosperous agricultural civilizations; also that, in nearly every case these forms have sanctioned human sacrifice. Even among ourselves, it is not so very long ago that a vent was provided for the hate complex by witch and heretic burnings. Further, it is to be noted that all these higher religions laid definite sanctions upon war, such as the Truce of God during the Middle Ages. Also, when, on account of interreligious struggles, these sanctions became inoperative, hate in war dominated, as it did during the Thirty Years War, which put to scorn all the horrors perpetrated in the name of Huitzilopochtli.

Once magical sacrifices disappear, the priest is virtually unfrocked, and, the beast in man being unchained, appalling physical sacrifices follow. Not only do whole nations become warlike; but, hate abounding, civilization passes into a state of wardom, in which war, in the form of competitive struggles and actual armed conflicts, becomes its staple industry.

This is what has happened in the present industrial age. Religion, having lost ninety-nine per cent. of its hold on the beast within man, that monster has crept out of its unconscious kennel and now dominates the conscious life of most of us.

We see this not only in the hatred which characterizes the peace time class struggles, but above all in the hatred which dominates the present war. In the sacred name of Hate, horrors are perpetrated which put Huitzilopochtli to the blush. Though thousands of victims were sacrificed on his altars, to-day tens of hundreds of thousands are sacrificed on those of international hate. Are not whole cities pulverized into dust and whole regions scorched by fire? Men, women and children of a dozen nations piled up in one ghastly holocaust to be gloated over by the beast which now possesses us.

What then is the solution? A return to the religious way of life and to the mastership over the beast by spiritual awe. Even were Western man to bend his knee to Huitzilopochtli, he would be petrified by the thought of the horrors he now gleefully perpetrates. Yet there is hope of a nobler way, for thus spake the Lord Shri Krishna:

"Whenever spirituality decays and materialism is rampant, then, O Arjuna! I reincarnate Myself.

"To protect the righteous, to destroy the wicked, and to establish the Kingdom of God, I am reborn from age to age."

December 1, 1943

XLVIII

POLICY AND WAR

WAR TO THE STATESMAN AND WAR TO THE SOLDIER ARE TWO DIFFERENT THINGS. To the former and according to Clausewitz, "War is a continuation of state policy by other means". To the latter, "War is nothing but a duel on an extensive scale". In the one case, war is "a continuation of political commerce" and in the other the "destruction of the enemy's military forces is the object of all combats".

Though these aspects of war are complementary their respective aims are antagonistic. That of the first is moderation; that of the second is violence; for as Clausewitz wrote: "War is an act of violence pushed to its utmost bounds". Therefore, should the second eclipse the first, it will cease to be its instrument and instead become its master, and a return to the moderation which peace demands will become impossible.

Clausewitz made this perfectly clear as follows:

"That the political point of view should end completely when war begins is only conceivable in contests which are wars of life and death, from pure hatred; as wars are in reality, they are. . . only the expression or manifestations of policy itself. The subordination of the political point of view to the military would be contrary to common sense, for policy has declared the war; it is the intelligent faculty, war only the instrument, and not the reverse. The subordination of the military point of view to the political is, therefore, the only thing which is possible."

Also:

"That policy may take a false direction does not concern us here, for, under no circumstances can the Art of War be regarded as its preceptor, and we can only look at policy . . . as the representative of the interests generally of the whole community."

Because policy should represent these interests, then, should they be threatened by a foreign power, normally diplomatic action results; and, should it fail, either the argument is abandoned or war is resorted to, to attain by force what diplomacy has failed to gain. This is accomplished by destroying the enemy's power of resistance, when perforce he must accept the argument and, generally, a bit more.

The political aim is, therefore, the directing factor in war, and from the days of the Tudors onwards the policy of our hard-headed ancestors had as its object the maintenance of the balance of power. To them, war, as much so as peace, was a business proposition and not a gladiatorial contest. Those who fashioned our policy in the sixteenth, seventeenth and eighteenth centuries were business-minded men and not romanticists, whose business was the security of the Empire and the prosperous homeland they were building, and not the behaviour of foreign nations or the rights and wrongs of their interminable quarrels.

This object—the balance of power—automatically fixed who the enemy was—namely, the nation whose policy or strength threatened our Empire or homeland. And as, normally, that nation was the strongest of the continental

powers, in peace time our statesmen favoured either the second strongest, or a group of powers which in coalition was only a little less strong than the strongest.

Based on this principle, their war policy was never aimed at winning a war in the sense of annihilating the enemy. Instead, its object was to reduce his strength to a level which would enable the balance of power to be reinstated. Once that level was reached, peace negotiations were opened and moderation was restored.

This policy was a logical one, because it fitted the military conditions imposed upon us by our insular position—the difficulty of intervening in force on the continent. Also it was acceptable to foreign nations, for had we been able to intervene in force—that is, had we possessed an army on the continental scale to supplement our all-powerful navy—we should have automatically upset the balance by potentially if not actually threatening all nations. This would have induced them to coalesce against us, when balancing would have become impossible.

As our object was to prevent any single foreign power establishing a hegemony over Europe, so equally it was never to be in a position to do so ourselves. Therefore, the idea of annihilating our enemy never entered our heads until our statesmanship was blurred by the romanticism of the French Revolution.

Even then it was still self-interest which guided our steps. This is illustrated by Pitt's oft-quoted saying: "England has saved herself by her exertions

and will, I trust, save Europe by her example."

Though the Napoleonic Wars were fought to a finish, the First Treaty of Paris, signed in 1814, was, as Professor H. A. L. Fisher wrote, "marked by a political moderation", and the Second Treaty of the following year, though more drastic, was far from being a vindictive one. The French frontier of 1790 was re-established, and though the German delegates demanded the annexation of Alsace and Lorraine, Wellington's objection carried the day. And as Fyffe said in his History of Modern Europe, it avoided the infliction of "the most galling of all tokens of defeat upon a spirited and still most powerful nation."

Thus was the balance of power restored and to our incalculable advantage, for during the following forty years we gained the peace we needed wherein to establish ourselves as the workshop of the world.

When we step up from these self-interested and business-like wars, in which winning was not reckoned in terms of punishment given, but in those of advantages gained, and enter the emotionalism and romanticism of the early twentieth century, we still find, though somewhat emaciated, the balance of power directing our policy.

Though in 1914 our pretext for war was the invasion of Belgium, the real cause was the German fleet. Second to our own and backed by the most powerful army in the world, together they challenged the balance of power. When that fleet was surrendered, as it was on the termination of hostilities, what should we have done?

To get back to the balance of power, as hitherto conceived, was impracticable; it did not fit an industrial age, in which power depends more on economic resources than on political alliances. Further, it is only workable in a stable world order, and, in 1919, the greater part of Europe was in revolution.

What, then, should we have done? My own opinion is, so far as it was possible, we should have written off our war losses; for the time being have kept clear of Europe, and during that time have concentrated on the economic, political and strategical development of our Empire. This would have placed us in a dominant position once the situation in Europe began to stabilize. Had we done so, then, I think, we could have held the balance of power, not by entering into alliances, but by assuming the position of a referee who, should another crisis arise, would name the aggressor and forthwith support his victim.

We did nothing of the sort. First, we virtually abandoned the Empire to become a partner in the greatest hoax of the age—the League of Nations. Secondly, we debated ad nauseam collective security and simultaneously emasculated it by disarming. Thirdly, we left our fighting men to drift into the gutters and made heroes of our conscientious objectors, not a few of whom became Ministers. Lastly, for a period of twenty years we adopted every international brawl as our own.

From 1919 onwards, so completely was our business instinct anæsthetized by romantic twaddle that, in 1935, the Government returned to power on the pacifist vote, four years later plunged us into war, not only utterly unprepared, but with no other aim than the annihilation of Fascism and National Socialism—a purely negative object.

So it has come about that our present aim is not self-interest tempered by moderation, but instead violence flogged into frenzy by hate.

Thus far, Mr. Churchill, the leader of our 1935 pacifists, has shown such an unqualified gusto for war that he would seem to have overlooked the fact that in war the constant aim of the head of a State is the establishment of a profitable peace. Should this be so, then he has subordinated the political point of view to the military, and, in consequence, if Clausewitz be right, has jettisoned common sense. "There is no sacrifice we will not make, no length in violence to which we will not go", though excellent militarily, what is its political end?

"Après nous le déluge" is not a policy, except perhaps in a madhouse.

To-day it would appear that we have reached a point when, in the name of "Victory", peace is excommunicated and laid under interdict.

Such a conclusion would have perplexed our ancestors: those hard-headed Englishmen who built our Empire and secured it. They saw that a military victory is not in itself equivalent to success in war, and that unless the decision won is more profitable than its cost, then the completer the victory the more universal the ruin.

They did not stand eyeless in Gaza to perish with the Philistines through their own violence.

December 7, 1943

XLIX

PEACE BEFORE TREATY

PEACE AND WAR ARE INTERNATIONALLY WHAT HEALTH AND SICKNESS ARE PHYSIologically. Sickness emerges from out of health, and may kill, cripple, debilitate, become remittent or give way to a return of healthfulness, and war emerging from out of peace may do likewise.

Until recently medicine and surgery were little other than witchcraft and butchery; yet, to-day, in spite of the enormous progress made in pathology—the science which treats with the nature of diseases, their causes, symptoms

and results-diplomacy and war remain largely as such.

As yet we have no true pathology of war. And though philanthropists, like the late Andrew Carnegie, may leave their millions to foster peace, we shall never begin to solve the problem of war until the world possesses a body of men who devote as much thought and attention to the diseases of peace, as physicians and surgeons do to the diseases of the human body. Without such scientists the causes of war will remain undiagnosed and the preventives applied will continue to savour of sorcery.

This is how things stood in 1919. Not only were the would-be peace-makers ignorant of the pathology of war, but the theatre in which they were called upon to operate was like the ward of a madhouse. Listen to an eyewitness of the event. This is what Mr. Harold Nicolson wrote in his "Peace-

making 1919",

"Given the atmosphere of the time, given the passions aroused in all democracies by four years of war, it would have been impossible even for supermen to devise a peace of moderation and righteousness."

Immediately after the signing of the Armistice of November 11, 1918,

Mr. Lloyd George predicted that

"No settlement which contravenes the principles of eternal justice will be a permanent one. Let us be warned by the example of 1871. We must not allow any sense of revenge and spirit of greed, any grasping desire, to override the fundamental principle of righteousness. Vigorous attempts will be made to hector and bully the Government in the endeavour to make them depart from the strict principles of right to satisfy some base, sordid, squalid ideas of vengeance and avarice."

Later on, in March, 1919, he addressed the following prophetic words to

the members of the Peace Conference:

"You may strip Germany of her colonies, reduce her armaments to a mere police force and her navy to that of a fifth-rate Power, all the same, if she feels that she has been unjustly treated in the peace of 1919, she will find means of exacting retribution from her conquerors. Injustice, arrogance displayed in the hour of triumph, will never be forgotten or forgiven . . ."

And this is exactly what happened. Vigorous attempts were made, and, unfortunately, successfully so, to hector and bully the peacemakers, and, because arrogance dominated, Germany did find the means of exacting re-

tribution; hence the present war. When it ends, are we to see this foolishness repeated?

Yet, how is it to be prevented, seeing that, on the conclusion of hostilities, the statesmen who are called upon to formulate the peace, will be as innocent of war pathology as were their predecessors of 1919?

Clearly, the first thing to do is to establish an atmosphere of sanity, so that they can work in peace. This means that the Gorgon, public opinion, must be enchained, otherwise the peacemakers will once again be petrified by it. This monster is the offspring of hate, therefore all those unbalanced people who set out to stoke up a war psychosis should be vigorously suppressed.

Secondly, we should clear our minds of cant, and bring ourselves to realize that we are living in the Age of the Economic Reformation, an age begotten by the machine. That our way of life is changing and that the new cults, such as Bolshevism, Fascism and National Socialism, are but violent expressions of this change, as violent as Lutheranism, Calvinism and Zwinglianism were in the sixteenth century. Unless we win this intellectual victory over our prejudices and interests, as our ancestors had to suffer a hundred years of religious wars, so may we have to suffer an equal period of economic ones.

Having shackled the beast within them and having won this intellectual victory, should the Allied Power win the war, before promulgating their peace terms they should assemble a Conference of the leading belligerents—victors and vanquished—to examine the causes of the war—the diseases which gave rise to it. Not until this has been done should the terms of peace be committed to paper and signed.

Again let us turn back to the last peace, and see what might have happened had this wisdom been followed.

President Wilson's dream of a League of Nations could only have become a reality had its principles been freely accepted by both victors and vanquished. Therefore the formation of the League should have preceded the formulation of the peace treaties. Had this course been adopted, the League could have examined the causes of war and have based the treaties on their elimination. Though this procedure would have delayed the signing of the treaties, perhaps for several years, the supreme gain would have been that during those years the nations would have returned to sanity.

What form of League do we want? This is the supreme question which will face us once the war ends. Should it be a League of Force—a political alliance of the victorious nations? Most certainly not, because, as Lord Keynes pointed out in 1919, the causes of war in this present age are not political and territorial, but financial and economic.

The instrument should, therefore, be so devised that it can eliminate the economic diseases of peace, and not merely suppress their fever—war. As sane would it be to bandage a wound with poisonous matter in it, as to leave economic and financial conditions as they are and maintain them by force. Such a procedure cannot cure, and must inevitably lead to the recurrence of conflict, either in the form of international wars or in unceasing revolutions, until the world arrives at economic sanity.

Therefore the instrument required is not a political one based on police power. Instead, it is an economic one possessing the fullest possible knowledge of financial, industrial, agricultural and commercial affairs. It should be a

Council and not a Dictatorship, which a political world instrument based on force must inevitably be. Also, it should be a clearing house for all economic transactions, and the laboratory of economic experiments. It should command an army of clerks, not of warriors, with bureaux and not barracks in every capital city.

Its main problems will be: First, to assess the economic potentials of the world; secondly, to group them into self-sufficient regions in which agriculture and industry are balanced so far as they possibly can be, and thirdly, to devise a world currency which, unlike gold, cannot be cornered and turned into a marketable commodity.

Though it may be argued that the problems which such a council will be called upon to examine will take long to solve, the mere fact that it is dealing with the fundamental diseases of peace, and, therefore, the fundamental causes of war, will give hope to the nations, and hope is fear reversed, and fear is the father of war.

Finally, let this be remembered: history proves clearly that all international alliances founded on force have been ephemeral in the extreme.

The old Grecian leagues broke up into contentious factions no sooner than their immediate tasks were accomplished. So did the Holy League of 1571, which, after its victory over the Turks at Lepanto, dissolved into violent quarrels. So did the Holy Alliance of 1815, the various Concerts of Europe and finally the League of Nations, in spite of its power to impose sanctions and in spite of the solemn obligations of its members.

Man is a fighting animal—that is the central fact in history. An animal who fights for food. Give him food and he can be tamed. Give him the lash and the more ferocious he becomes.

Once the war is ended, should the nations be unable to apply this simple wisdom and thereby shackle the beast within them, then a third world war is inevitable, as inevitable as wars have hitherto been, and as inevitable as they were when in his *De Monarchia* Dante cried: "O Race of Mankind. What storms must toss thee, what losses must thou endure, what shipwrecks must buffet thee, so long as thou, a beast of many heads, strivest after contrary things."

December 14, 1943

L

THE CITY AND THE BOMB

OUR NORMAL PROGRESS THROUGH LIFE IS FROM CITY TO CITY, AND WHAT WE call "civilization" is in the main city-built and circumscribed. To visit a new city is like opening a casket of strange jewelry: some are beautiful, some commonplace and others but vulgar trash. Yet it is their tangled oneness, their mingling histories which awaken our interest—what next?

Cities have great names which thrill us when we hear or read them. Not so much those to be found upon maps, as those titles of renown, such as: City of the Masts, of the Great King, of the Spindles; City of the Hundred Towers, of the Seven Hills and of the Sun.

Cities are histories fashioned of brick and stone. Who is not thrilled, as I was, when, travelling northwards on the road to Trujillo, that small city appears crouching on its ridge, to awaken within one the memory of Pizarro and the Conquistadores. Whose breath has not been caught up when, as the Saragossa road sharply twists right-handed through the Valencian hills, Morella's embattled rock, tier upon tier, flashes into sight. And even should not one fragment of its history be known or remembered, its very poise is of history dreaming.

And so with every other city, including the megapoli of America, though their histories are still in the rough.

Once, at midnight, I entered Chicago from the north, and wizardry engulfed me. On my right, as I crossed the river, a vast building, glowing white under the rays of a fan light, jutted up into the night like the face of a gigantic iceberg, and opposite to it rose a towering mass of blackness, gloomy and without a light, brooding high above me, its summit mingling with the stars. I was in a land of primeval magic, of pre-history, and though the tower on my left was as yet unfinished and the city it dwelt in but 122 years old, nevertheless, I sensed history in the making. In truth, all great cities are big with wonder and dreams.

"The city", writes Lewis Mumford in his The Culture of Cities . . . " is the point of maximum concentration of the power and culture of a community . . . Cities are a product of time. They are the molds in which men's lifetimes have cooled and congealed . . . In the city, time becomes visible: buildings and monuments and public ways, more open than the written records . . . leave an imprint upon the minds even of the ignorant or the indifferent . . . By the diversity of its time structures, the city in part escapes the tyranny of a single present . . . life in the city takes on the character of a symphony . . . With language itself, it remains man's greatest work of art."

In fact, we are what our cities make us: living histories—unconsciously so—fashioned by the petrified history in which we are encased. Then falls the bomb, and in thirty minutes the work of thirty generations is heaped into dust. Not even Vesuvius, Etna or Stromboli have proved so all-obliterating.

What does this mean to civilization, to the future, to the way of life Western man will have to tread once the war is ended, and he sets forth to rebuild his shell?

Will it mean the wizardry of Chicago and New York? Though in Europe this is unlikely, whatever form our cities take, they will be fashioned by "the tyranny of a single present". Once destroyed, Trujillos and Morellas are gone for ever. They are dead, because no replicas can exude their history. Therefore the dwellers in these new cities will be different from ourselves, because their cities will take on the character of a monotony—the symphony will be no more.

Conjure up before you the destruction that Western man has wrought and, then, ponder. We are fighting for the things our cities gave us: liberty, democracy, parliamentary government, wealth and trade. Yet in their destruction these very things are being destroyed and far more surely so than any hostile idealogy could ever do.

For instance, take cities like Berlin, Hamburg and Cologne-great cities

of four million, two million and one million inhabitants. The first rose from out a Wendish village, the second began its life as a Carlovingian fortress, and the third as a Roman colony—hence its name—planted by the Emperor Claudius. Like plants, they grew gradually: now, for the greater part, they will have to be rebuilt in a handful of years.

No doubt they will be meticulously planned, yet monotonously so; for their architects will be of one generation and of one architectural impulse. Their cities will be utilitarian in form and communistic in character. They will be human hives rather than homes; rapidly built, for man must have shelter, and those who dwell in them will become bees: symmetrically-minded, efficient—yes, but historically soulless.

Under no democratic system can these cities be erected: solely under a tyranny and by slave labour. The virtue of a democracy is that it never hurries, it argues as well as works. But when millions of people have to be housed and thousands of factories resurrected in a moment, work will be the order of the day and words will be silenced at the pistol point; for what thirty generations did at their leisure, one will now have to do through toil and sweat. It will be the building of the pyramids over again, and the crack of the lash will be heard throughout Europe.

No money system, no usury, no borrowing will foot the bill. How can the rebuilding of Berlin or Hamburg, or even of Coventry or Bristol be financed, let alone the thousands of other devastated cities? The money power will melt into the slave power: muscle and materials and not loans and credit will build these human hives and anthills.

Thus, on account of the bomb and the discovery of flight, the whole social, economic, financial and political life of Western man will be changed. Strange though it may seem, day by day and hour by hour, the very things we are fighting for are being silted up by the rubble and dust of the very means of war which we imagine can liberate the nations and secure for all time our own freedom.

For a hundred years and more Western man has lived, wived, worked and died under the shadow of a Vesuvius of his own making. A Pompeian he was, a Pompeian he still is, yet a Pompeian he will soon cease to be, save as a mummy; for in this war he has detonated his volcano.

Vulcanus is his god, the god who presides over fire, the patron of workers in mines and at forges. The builder of the factory and the slum, the two most prominent architectural monuments of this age of iron.

And now the tremendous drama of the Unknown faces him—a judgment of Providence and a judgment of God. He fashioned a City of Destruction, such as Christian set out from on his pilgrimage. Nevertheless, unlike that symbolic traveller, as yet he has no Celestial City—no City of God—to beckon him on.

Indeed, it would seem that this war is a divine judgment, a premonition of things to come which will cause such righteous men as may yet be found to flee the cities of the plain—that civilization which is doomed on account of its iniquity.

And Abraham "looked towards Sodom and Gomorrah, and toward all the land of the plain, and beheld, and, lo, the smoke of the country went up as the smoke of a furnace." Those words are familiar to-day. Once we had a great poet, in this Vulcanian age now little read. His name is James Thomson, and in 1857 he wrote a poem—"The Doom of a City". Listen to these his words and contemplate them:

"The ashen fire-flood in a tempest grey
Hissed through the City and the wan array;
And hurrying o'er the sea, as if it might
With grim joy hasten to fulfil such trust,
Swept all the human and palatial dust
To irretrievable Chaos, Death and Night.

"And when that deadly storm of fire was past, A Voice came roaring like its final blast;

"'Whose Virtue Cannot Pay Their Life's Expense,
Whose Souls Are Lost In Sense,
They Are No More; Themselves With God Have Willed—
Their Æon Is Fulfilled'."

January, 1944

THE END.